Quality Measures for Encounter Data

California Department of Health Care Services

Managed Care Quality and Monitoring Division

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Version 1.1

Revision History

Document Version	Publication Date	Revision Author(s)	Brief Description of Document Changes
1.0	1/1/2015	T. Wright	Initial Published Version
1.1	8/8/2018	T. Akers	Minor revisions to DCMT.003 and DAMT.001.

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1) Overview

This document describes in detail the encounter data quality measures used by DHCS. The reason for measuring data quality is to improve it – to use metrics to drive data quality improvement efforts. Improved data quality supports improved analysis, management, and policy setting for DHCS.

This document specifies how DHCS will measure the quality of encounter data. It does not specify how DHCS will measure the quality of the health care services described in the encounter data.

There are multiple intended audiences for this document:

- The Encounter Data Quality Unit (EDQU) within DHCS uses this document to communicate to any parties interested in how DHCS measures the quality of encounter data.
- The Managed Care Plans (MCPs) that submit encounter data to DHCS can use this document to understand how DHCS measures the quality of that data.
- Researchers and analysts within DHCS use this document to understand how DHCS measures data quality. When the EDQU reports on data quality, these researchers and analysts can better understand the measures by referring to this document.

This document does not address other categories of data, such as Medi-Cal Fee-for-Service (FFS) claims, Electronic Health Records (EHR), or reference files.

1.1 Dimensions of Data Quality

DHCS defines "data quality" as "the fitness for use of the data". This includes four principle dimensions - CART:

- Data **C**ompleteness
- Data **A**ccuracy
- Data **R**easonability
- Data **T**imeliness

This document describes measures that DHCS uses to assess encounter data quality in all four of these dimensions.

Definitions and illustrations of each of these dimensions follow.

1.1.1 Data Completeness

Data is complete when:

- All real world events (in this case, an encounter between a Medi-Cal beneficiary and a managed care provider) are represented in the data
- Only real world events are represented in the data

The first part addresses missing data; the second part addresses surplus or duplicate data.

For example, when health care services are provided but the encounter data is not successfully submitted to DHCS, data is incomplete, and analysis of that data is untrustworthy. When duplicate data is submitted, it also undermines the credibility of analyses based on that data.

When the data is incomplete, it reduces the confidence that can be placed in analysis and reporting based on that data.

1.1.1 Data Accuracy

Data is accurate when it correctly depicts the real world events and entities that it purports to represent. The medical records of the Medi-Cal beneficiaries will be the standard against which encounter data will be measured.

Inaccurate data is of limited value for analysis and reporting, since analytic results will not represent reality.

1.1.2 Data Reasonability

Data is reasonable when:

- The individual data are valid
- The data set taken as a whole is plausible

The individual data are *valid* when they are structured appropriately, only contain values that are allowed for the data elements, and pass basic edits.

The data set taken as a whole is *plausible* when statistical analysis of characteristics of the data conforms to expectations. Data plausibility is similar to data accuracy, but they are not identical. Plausibility is determined by statistical analysis of the data, where data accuracy is determined by ascertaining whether a sample of the data correctly describes the real world events. Data may appear reasonable, but still lack accuracy.

If a data element on an encounter requires NPI, and instead a name is reported in that data element, that encounter would be invalid.

If an encounter included a pregnancy-related diagnosis for a male beneficiary, that encounter is invalid. If all the encounters in a particular data set were individually valid, but analysis showed that a particular provider averaged 36 hours a day of office visits, that data set is implausible.

When data lacks reasonability, it is untrustworthy and difficult to use for analysis and reporting.

1.1.3   Data Timeliness

Data is timely when the span of time between the occurrence of a real world event and its appearance in the data is short enough that the occurrence can be included in data analysis and reports. In this case, the date the real world event occurred is the Date of Service (DOS) of the encounter, and the date when the event is considered part of the data is the Submission Date to DHCS. The number of calendar days between those dates is the "lagtime".

Data completeness and data timeliness are closely related, but not identical.

If the average lagtime is excessive, even if data completeness is eventually achieved, it becomes difficult to use the data for timely analysis and reporting.

1.2   Data Reviewed

The measures in this document presume the encounter data is being submitted in one or more of the following formats:

- X12 837I, version 5010 – institutional encounters
- X12 837P, version 5010 – professional encounters
- NCPDP 2.2 or 4.2 – pharmacy encounters

Some measures may include data that was submitted in legacy formats, including:

- Encounter Data Format (Encounter Data Element Dictionary For Managed Care Plans, version 1.5, revised July, 2006) – institutional, professional, and pharmacy encounters
- Encounter Data Format (Encounter Data Element Dictionary For Managed Care Plans, version 2.0, revised April, 2013) – institutional, professional, and pharmacy encounters
- S-35C (Paid Claims And Encounters Standard 35C-File Data Element Dictionary) – institutional, professional, and pharmacy encounters

All of the measures in this document are specifically intended to review DHCS managed care encounter data. Other sources of encounter data, such as Medicare encounters

that are shared with DHCS as part of the Coordinated Care Initiative (CCI), are not included in these measures.

2) Data Completeness Measures

Data is complete when:

- All real world events (in this case, an encounter between a Medi-Cal beneficiary and a managed care provider) are represented in the data
- Only real world events are represented in the data

The first part addresses missing data; the second part addresses surplus or duplicate data.

For example, when health care services are provided but the encounter data is not successfully submitted to DHCS, data is incomplete, and analysis of that data is untrustworthy. When duplicate data is submitted, it also undermines the credibility of analyses based on that data.

When the data is incomplete, it reduces the confidence that can be placed in analysis and reporting based on that data.

Measure Number	Measure Name
Threshold Measures	
DCMT.001	Control Chart for Number of Visits by Beneficiary Aid Category
DCMT.002	Percentage of Duplicate Submissions
DCMT.003	Compare Encounters to Medical Records (A&I)
Information Only Measures	
DCMI.001	Comparison to Rate Development Templates
DCMI.002	Compare Actual Visits to Adjusted Expected Visits
DCMI.003	Visits Trend Report

2.1   DCMT.001 Control Chart for Number of Visits by Beneficiary Aid Category

2.1.1 DCMT.001 Overview

This measure identifies instances where the number of visits is either above or below the natural variation of the number of reported visits over time. This is done by using statistical process control (SPC) methodology to determine whether the number of visits, by type of encounter, is "in control" (within the statistically ascertained upper and lower normal limits). A control chart is created for the number of visits by encounter type for each MCP, with the upper and lower control limits based on historical visit rates among all full-scope Medi-Cal managed care plans case-mix adjusted to the index MCP's enrollment.

A visit is the unique combination of billing provider ID, beneficiary ID, and DOS.

 "Actual Visits" are based on the encounter data submitted by the MCP.

"Index MCP" is the MCP for which the control limits are applied.

"Index month" is the month of service for which the control limits are calculated.

DHCS calculates the control limits as follows.

1. Calculate the rate of visits per certified eligible member for each MCP, encounter type, aid code category, and month of service.
2. For each index MCP, generate the number of visits expected for the month and encounter type if the visit rates for each aid category in the index MCP was equal to that of each non-index MCP in each of the 12 months preceding the index month.
3. The rates per aid category are applied to the number of beneficiaries enrolled in the aid category in the index MCP, and then summed to obtain the total case-mix adjusted expected number of visits. This results in the following number of data points for each index MCP and month:

    No. of encounter types x No. MCPs x 12 preceding months

    Rates equal to zero visits per member and rates computed on fewer than 10 enrolled members or fewer than 10 actual visits are not used to create the expected number of visits to reduce the influence of outliers.

4. Use the resulting data points to calculate the mean and standard deviation of the expected number of visits per index MCP, month, and encounter type.

The upper control limit is equal to the mean plus two standard deviations. The lower control limit is equal to the mean minus two standard deviations or zero, whichever is greater.

5. Plot the actual visits and the upper and lower control limits on a graph.

This measure is not used as a threshold until the MCP has at least 12 months of data to include in the analysis.

2.1.2 DCMT.001 Specifications

Create a control chart to measure the number of visits in the index MCP against the control limits derived from the case-mix adjusted historical experience of non-index MCPs.

"Visits" are defined as the unique combination of billing provider, beneficiary, and DOS.

"Certified eligibles" are beneficiaries who either do not have a share of cost, or have met their share of cost for the month.

This analysis is stratified by type of encounter:

- Physician/Outpatient
- Pharmacy

The results are represented in a graph:

- **X-axis:** most recent 36 Months of Service
- **Y-axis:** number of visits
- **Actual visits:** number of visits for that type of encounter per 1,000 beneficiaries for the specific MCP
- **Upper Control Limit –** 2 standard deviations above the statewide average
- **Lower Control Limit –** 0 or 2 standard deviations below the statewide average, whichever is higher

Visit rates are stratified into distinct aid categories derived from the beneficiary aid code, Medicare status, and age. The groupings are (see Section 9 for the logic used to create these categories):
- Adult & Family (18 and Under)
- Adult & Family (Over 18)
- Aged & Disabled / Non-dual
- Disabled/Dual
- Aged / Dual

- BCCTP
- LTC / Non-dual
- LTC / Dual
- Other

2.1.3 DCMT.001 Expected Outcome

MCP visits are above the lower control limits for the months being reviewed. If there are less than 12 months of data available, this is Information Only.

2.1.4 DCMT.001 Mockup of Report

Physician/OP Visits by Beneficiary Aid Category

Rx Visits by Beneficiary Aid Category
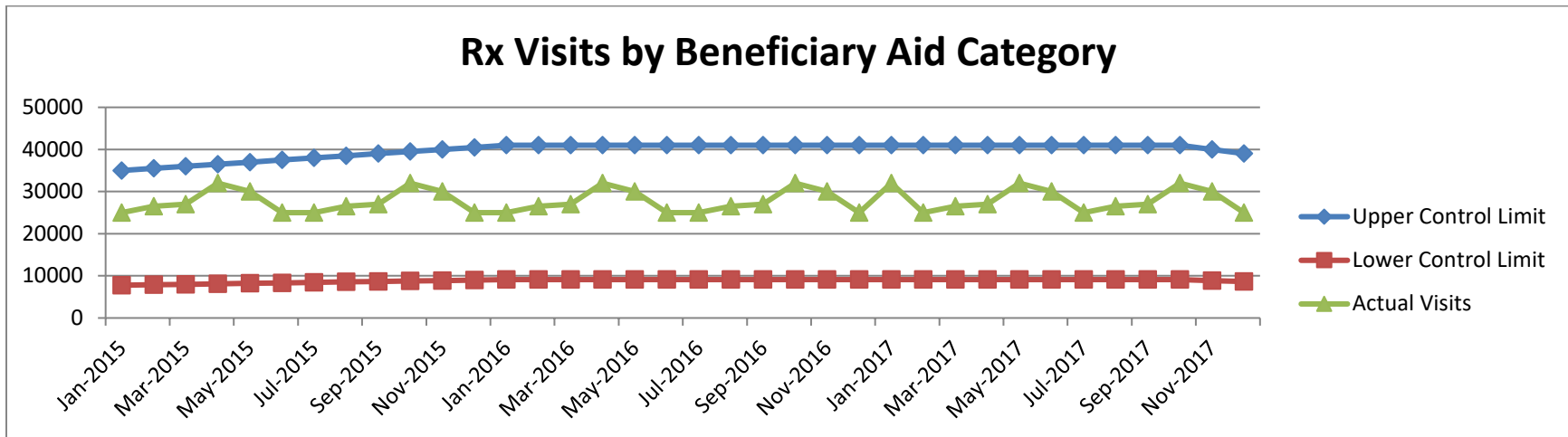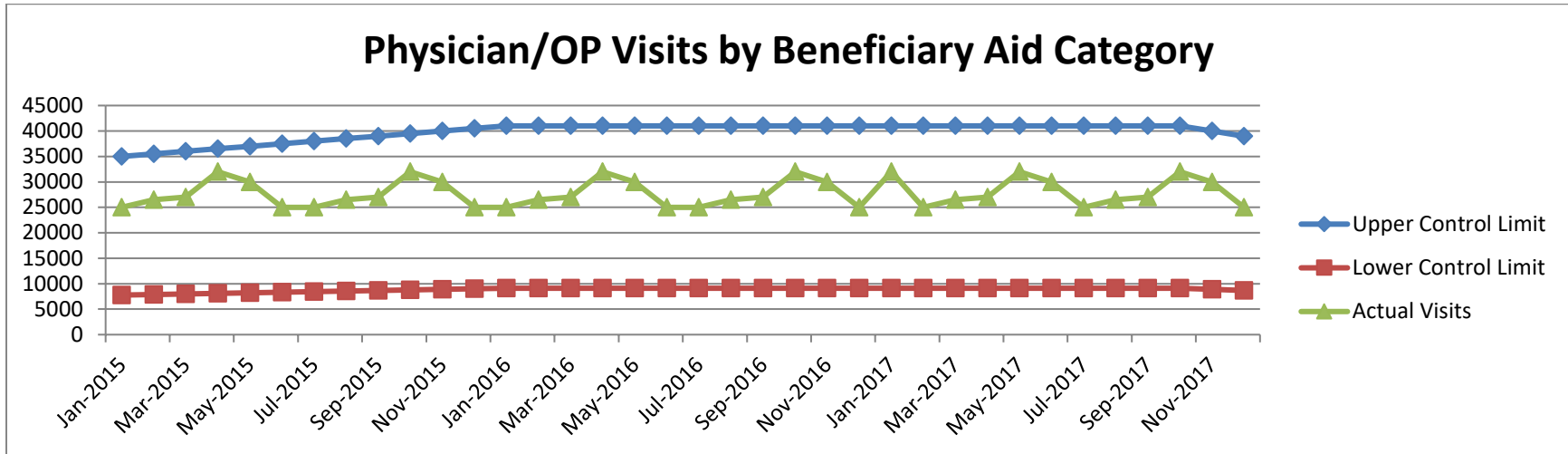
2.1.5 DCMT.001 Frequency

This measure is applied quarterly, with a 13-month lag. For example, in January 2016 this measure is run for dates of service in October 2014, November 2014, and December 2014 (including the prior 33 months as part of the chart).

2.1.6 DCMT.001 Change Log

Measure Version	Document Version	Author(s)	Effective Date	Description of Changes
1.0	1.0	T. Wright	1/1/2015	Initial version of measure.

2.2 DCMT.002 Percentage of Duplicate Submissions

2.2.1 DCMT.002 Overview

This measure calculates the percentage of encounters submitted to DHCS that are duplicates of previously submitted encounters. A void or replacement of an existing accepted encounter is not considered a duplicate – only when the same encounter is submitted multiple times is it considered a duplicate.

2.2.2 DCMT.002 Specifications

This measure reports the total number of encounters submitted during the period, the number of those encounters that are duplicates of previously accepted encounters and the percentage of encounters that are duplicates, by Plan Code and Transaction Type, received during the submission period.

Transaction Type:

- Institutional
- Professional
- Pharmacy

The methodologies for identifying duplicate encounters are outlined in DHCS' companion guides for X12 837 transactions and NCPDP Post Adjudication Payer Sheets for encounter data. DHCS maintains and makes available exception rules indicating in what circumstances duplicates are acceptable.

2.2.3 DCMT.002 Expected Outcome

The expected outcomes are measured by transaction type:

- ≤7% of Institutional encounters are duplicates of already accepted encounters
- ≤7% of Professional encounters are duplicates of already accepted encounters
- ≤4% of Pharmacy encounters are duplicates of already accepted encounters

If any of these thresholds is exceeded, this measure fails. If all are met, this measure passes.

2.2.4 DCMT.002 Mockup of Report

Measure	Plan Code	Submission Quarter	Result	Institutional			Professional			Pharmacy		
				Total	Duplicates	Duplicate Percentage	Total	Duplicates	Duplicate Percentage	Total	Duplicates	Duplicate Percentage
DCMT.002	XXX	2015Q1	Pass	100	2	2%	100	3	3%	100	1	1%
DCMT.002	YYY	2015Q1	Fail	100	8	8%	100	8	8%	100	5	5%

2.2.5 DCMT.002 Frequency

This measure is applied quarterly, with a 1-month lag. For example, in January 2015 this measure is run for dates of submission in October, November, and December 2014.

2.2.6 DCMT.002 Change Log

Measure Version	Document Version	Author(s)	Effective Date	Description of Changes
1.0	1.0	T. Akers	1/1/2015	Initial version of measure.

2.3   DCMT.003 Compare Encounters to Medical Records

2.3.1 DCMT.003 Overview

DHCS or its contracted External Quality Review Organization (EQRO) evaluates encounter data completeness by performing a comparative analysis between the encounter data in the DHCS data warehouse and the data in the providers' medical records. This measure validates whether a specific encounter can be found in both the medical records and DHCS encounter data.

2.3.2 DCMT.003 Specifications

Encounter data is extracted from the DHCS data warehouse to create a sampling pool for this comparative analysis. The samples are selected based on the beneficiary enrollment data, encounter data, and provider data. A two-stage sampling technique is used to select samples. First, random sampling is used to select beneficiaries from the sampling pool for each participating MCP. Secondly, for each beneficiary selected, random sampling is used to select one professional visit. These samples are used to validate that DHCS encounter data matches the medical records.

In addition, a second professional visit is randomly selected from the provider's records for each selected beneficiary to validate whether encounter data from the medical records matches DHCS encounter data. Only one professional visit is evaluated if the selected beneficiary does not have a second visit with this provider.

A statistically valid sample size is selected for each MCP.

The following data elements are compared between the medical records and DHCS encounter data to identify a matched encounter:
- Billing Provider
- Beneficiary
- DOS

Encounters that are identical with all three elements are considered "matched"; encounters that are identical in two or fewer elements are not considered a match.

2.3.3 DCMT.003 Expected Outcome
Fewer than 10% of the visits identified in medical records are unmatched to DHCS encounter data; AND fewer than 10% of the DHCS encounter data are unmatched to the medical records.

2.3.4 DCMT.003 Mockup of Report

Measure	Plan Code	Review Quarter	Result	Total Number of Encounters	Count of Matched Encounters	% Of Matched Encounters	Total Number of Medical Records	Count of Matched Medical Records	% Of Matched Medical Records
DCMT.003	XXX	2015Q1	Pass	200	190	95.0%	200	190	95.0%
DCMT.003	YYY	2015Q1	Fail	200	100	50.0%	200	100	50.0%

2.3.5 DCMT.003 Frequency

This is an annual measure. It will be included in the quarterly summaries of the quarter in which the results become available.

2.3.6 DCMT.003 Change Log

Measure Version	Document Version	Author(s)	Effective Date	Description of Changes
1.0	1.0	L. Saengsavang	1/1/2015	Initial version of measure.
1.1	1.1	T. Akers	8/8/2018	Minor clarifying edits to the Overview and Specifications, including replacing references to A&I with the EQRO.

2.4   DCMI.001 Comparison to Rate Development Templates

2.4.1 DCMI.001 Overview

The MCPs submit a Rate Development Template (RDT) to DHCS on an annual basis that summarizes their managed care data for the prior year. This measure compares this summarized data to the encounter data submitted throughout the year.

Note that the RDT contains many items that are not calculated from encounter data. This measure focuses solely on items that are comparable, such as service units and service costs.

DHCS expects that the utilization data will match 100%. DHCS expects that any data the MCPs use to create the RDT is also submitted as encounter data.

2.4.2 DCMI.001 Specifications

Compare encounter data to Rate Development Templates (RDT) – recreate the counts of service units and service costs in the RDT based entirely on encounter data.

The relevant section of the RDT is Schedule 1 Cost and Utilization Summary. The report run from encounter data is based on the specifications in the RDT.

2.4.3 DCMI.001 Mockup of Report

	Utilization Detail				Unit Cost Detail				PMPM Detail			
Inpatient	RDT	ENC	Diff	% Diff	RDT	ENC	Diff	% Diff	RDT	ENC	Diff	% Diff
Adult & Family (18 and under)	234	137	-97	-41.45%	$2,800.08	$1,613.44	($1,186.64)	-42.38%	$54.56	$20.35	($34.21)	-62.70%
Adult & Family (over 18)	463	513	50	10.80%	$2,047.63	$1,590.20	($457.43)	-22.34%	$78.97	$75.75	($3.22)	-4.08%
Aged/Disabled/Non-Dual	1,419	1,334	-85	-5.99%	$2,279.55	$2,013.33	($266.22)	-11.68%	$269.47	$230.93	($38.54)	-14.30%
Disabled/Dual Eligible	84	1,768	1,684	2004.76%	$24,993.35	$282.64	($24,710.71)	-98.87%	$175.31	$106.83	($68.48)	-39.06%
Aged/Dual Eligible	112	1,391	1,279	1141.96%	$4,991.41	$273.52	($4,717.89)	-94.52%	$46.61	$91.21	$44.60	95.69%
LTC/Non-Dual	4,745	4,331	-414	-8.72%	$1,935.51	$1,385.28	($550.23)	-28.43%	$765.37	$698.96	($66.41)	-8.68%
LTC/Dual Eligible	81	1,130	1,049	1295.06%	$1,586.18	$67.93	($1,518.25)	-95.72%	$10.66	$14.48	$3.82	35.83%
All Other COAs	2,287	2,307	20	0.87%	$2,046.91	$0.00	($2,046.91)	-100.00%	$390.13	$390.11	($0.02)	-0.01%
Long Term Care	RDT	ENC	Diff	% Diff	RDT	ENC	Diff	% Diff	RDT	ENC	Diff	% Diff
Adult & Family (18 and under)	44	45	1	2.27%	$185.87	$183.42	($2.45)	-1.32%	$0.69	$0.70	$0.01	1.45%
Adult & Family (over 18)	107	113	6	5.61%	$260.94	$251.98	($8.96)	-3.43%	$2.33	$2.39	$0.06	2.58%
Aged/Disabled/Non-Dual	2,658	2,943	285	10.72%	$234.93	$220.34	($14.59)	-6.21%	$52.03	$55.95	$3.92	7.53%
Disabled/Dual Eligible	1,899	2,130	231	12.16%	$162.95	$156.02	($6.93)	-4.25%	$25.78	$30.82	$5.04	19.55%
Aged/Dual Eligible	5,973	6,557	584	9.78%	$169.37	$164.65	($4.72)	-2.79%	$84.30	$94.14	$9.84	11.67%
LTC/Non-Dual	166,540	167,579	1,039	0.62%	$165.64	$157.22	($8.42)	-5.08%	$2,298.74	$2,195.52	($103.22)	-4.49%
LTC/Dual Eligible	247,663	240,879	-6,784	-2.74%	$154.57	$152.50	($2.07)	-1.34%	$3,190.08	$3,065.77	($124.31)	-3.90%

	Utilization Detail				Unit Cost Detail				PMPM Detail			
All Other COAs	1,485	1,454	-31	-2.09%	$249.83	$0.00	($249.83)	-100.00%	$30.92	$31.41	$0.49	1.58%
Pharmacy	**RDT**	**ENC**	**Diff**	**% Diff**	**RDT**	**ENC**	**Diff**	**% Diff**	**RDT**	**ENC**	**Diff**	**% Diff**
Adult & Family (18 and under)	2,683	3,131	448	16.70%	$49.20	$0.26	($48.94)	-99.47%	$11.00	$0.07	($10.93)	-99.36%
Adult & Family (over 18)	10,030	11,418	1,388	13.84%	$33.97	$0.54	($33.43)	-98.41%	$28.39	$0.51	($27.88)	-98.20%
Aged/Disabled/Non-Dual	27,989	28,770	781	2.79%	$64.24	$1.43	($62.81)	-97.77%	$149.84	$3.43	($146.41)	-97.71%
Disabled/Dual Eligible	2,967	8,281	5,314	179.10%	$23.31	$3.06	($20.25)	-86.87%	$5.76	$2.12	($3.64)	-63.19%
Aged/Dual Eligible	1,521	6,828	5,307	348.92%	$16.53	$1.40	($15.13)	-91.53%	$2.10	$0.80	($1.30)	-61.90%
LTC/Non-Dual	26,099	15,489	-10,610	-40.65%	$21.19	$0.00	($21.19)	-100.00%	$46.08	$0.00	($46.08)	-100.00%
LTC/Dual Eligible	5,368	4,768	-600	-11.18%	$15.83	$5.50	($10.33)	-65.26%	$7.08	$2.19	($4.89)	-69.07%
All Other COAs	10,775	10,392	-383	-3.55%	$41.05	$0.00	($41.05)	-100.00%	$36.86	$0.18	($36.68)	-99.51%
Professional	**RDT**	**ENC**	**Diff**	**% Diff**	**RDT**	**ENC**	**Diff**	**% Diff**	**RDT**	**ENC**	**Diff**	**% Diff**
Adult & Family (18 and under)	5,383	3,011	-2,372	-44.06%	$61.91	$58.52	($3.39)	-5.48%	$27.77	$15.65	($12.12)	-43.64%
Adult & Family (over 18)	7,151	5,127	-2,024	-28.30%	$89.86	$101.05	$11.19	12.45%	$53.55	$47.79	($5.76)	-10.76%
Aged/Disabled/Non-Dual	12,685	8,185	-4,500	-35.47%	$103.45	$129.13	$25.68	24.82%	$109.35	$101.03	($8.32)	-7.61%
Disabled/Dual Eligible	11,208	9,519	-1,689	-15.07%	$24.48	$24.20	($0.28)	-1.14%	$22.87	$32.28	$9.41	41.15%
Aged/Dual Eligible	10,831	9,317	-1,514	-13.98%	$28.06	$29.32	$1.26	4.49%	$25.32	$39.92	$14.60	57.66%
LTC/Non-Dual	17,658	12,872	-4,786	-27.10%	$40.30	$39.00	($1.30)	-3.23%	$59.30	$69.16	$9.86	16.63%
LTC/Dual Eligible	7,752	6,424	-1,328	-17.13%	$21.77	$25.80	$4.03	18.51%	$14.06	$24.29	$10.23	72.76%

	Utilization Detail				Unit Cost Detail				PMPM Detail			
All Other COAs	11,655	8,518	-3,137	-26.92%	$242.72	$0.00	($242.72)	-100.00%	$235.75	$249.24	$13.49	5.72%
Primary Care Physician	RDT	ENC	Diff	% Diff	RDT	ENC	Diff	% Diff	RDT	ENC	Diff	% Diff
Adult & Family (18 and under)	3,090	2,231	-859	-27.80%	$49.27	$50.48	$1.21	2.46%	$12.69	$9.83	($2.86)	-22.54%
Adult & Family (over 18)	1,442	3,026	1,584	109.85%	$114.04	$86.70	($27.34)	-23.97%	$13.71	$23.43	$9.72	70.90%
Aged/Disabled/Non-Dual	2,700	4,049	1,349	49.96%	$69.23	$120.56	$51.33	74.14%	$15.57	$45.91	$30.34	194.86%
Disabled/Dual Eligible	1,968	4,641	2,673	135.82%	$19.36	$25.46	$6.10	31.51%	$3.17	$15.08	$11.91	375.71%
Aged/Dual Eligible	1,972	4,553	2,581	130.88%	$19.48	$33.42	$13.94	71.56%	$3.20	$20.07	$16.87	527.19%
LTC/Non-Dual	5,110	6,466	1,356	26.54%	$52.69	$45.43	($7.26)	-13.78%	$22.44	$36.05	$13.61	60.65%
LTC/Dual Eligible	1,834	3,082	1,248	68.05%	$6.19	$7.89	$1.70	27.46%	$0.95	$5.18	$4.23	445.26%
All Other COAs	2,200	4,293	2,093	95.14%	$126.21	$0.00	($126.21)	-100.00%	$23.14	$167.31	$144.17	623.03%
Specialist	RDT	ENC	Diff	% Diff	RDT	ENC	Diff	% Diff	RDT	ENC	Diff	% Diff
Adult & Family (18 and under)	1,084	635	-449	-41.42%	$75.64	$83.76	$8.12	10.74%	$6.84	$4.89	($1.95)	-28.51%
Adult & Family (over 18)	3,168	1,923	-1,245	-39.30%	$98.15	$114.01	$15.86	16.16%	$25.91	$21.26	($4.65)	-17.95%
Aged/Disabled/Non-Dual	6,787	3,870	-2,917	-42.98%	$136.08	$136.60	$0.52	0.38%	$76.96	$51.65	($25.31)	-32.89%
Disabled/Dual Eligible	6,936	4,394	-2,542	-36.65%	$19.63	$22.83	$3.20	16.30%	$11.35	$15.78	$4.43	39.03%
Aged/Dual Eligible	7,098	4,371	-2,727	-38.42%	$25.89	$25.61	($0.28)	-1.08%	$15.31	$18.85	$3.54	23.12%
LTC/Non-Dual	12,319	6,376	-5,943	-48.24%	$35.10	$32.66	($2.44)	-6.95%	$36.03	$33.11	($2.92)	-8.10%
LTC/Dual Eligible	5,358	2,702	-2,656	-49.57%	$14.70	$22.22	$7.52	51.16%	$6.56	$10.34	$3.78	57.62%

	Utilization Detail				Unit Cost Detail				PMPM Detail			
All Other COAs	8,196	4,120	-4,076	-49.73%	$302.09	$0.00	($302.09)	-100.00%	$206.32	$79.22	($127.10)	-61.60%
FQHC	**RDT**	**ENC**	**Diff**	**% Diff**	**RDT**	**ENC**	**Diff**	**% Diff**	**RDT**	**ENC**	**Diff**	**% Diff**
Adult & Family (18 and under)	1,022	70	-952	-93.15%	$70.04	$48.76	($21.28)	-30.38%	$5.96	$0.33	($5.63)	-94.46%
Adult & Family (over 18)	2,381	20	-2,361	-99.16%	$54.52	$39.63	($14.89)	-27.31%	$10.82	$0.07	($10.75)	-99.35%
Aged/Disabled/Non-Dual	2,400	46	-2,354	-98.08%	$44.45	$30.86	($13.59)	-30.57%	$8.89	$0.13	($8.76)	-98.54%
Disabled/Dual Eligible	1,841	19	-1,822	-98.97%	$46.92	$1.77	($45.15)	-96.23%	$7.20	$0.04	($7.16)	-99.44%
Aged/Dual Eligible	1,381	11	-1,370	-99.20%	$51.29	$0.00	($51.29)	-100.00%	$5.90	$0.00	($5.90)	-100.00%
LTC/Non-Dual	228	0	-228	-100.00%	$43.47	$0.00	($43.47)	-100.00%	$0.83	$0.00	($0.83)	-100.00%
LTC/Dual Eligible	0	0	0	0.00%	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	0.00%
All Other COAs	1,141	0	-1,141	-100.00%	$32.69	$0.00	($32.69)	-100.00%	$3.11	$0.00	($3.11)	-100.00%
Other Med. Professional	**RDT**	**ENC**	**Diff**	**% Diff**	**RDT**	**ENC**	**Diff**	**% Diff**	**RDT**	**ENC**	**Diff**	**% Diff**
Adult & Family (18 and under)	187	76	-111	-59.36%	$146.64	$92.78	($53.86)	-36.73%	$2.29	$0.60	($1.69)	-73.80%
Adult & Family (over 18)	159	157	-2	-1.26%	$234.54	$226.93	($7.61)	-3.24%	$3.11	$3.03	($0.08)	-2.57%
Aged/Disabled/Non-Dual	799	219	-580	-72.59%	$119.04	$176.24	$57.20	48.05%	$7.93	$3.35	($4.58)	-57.76%
Disabled/Dual Eligible	463	465	2	0.43%	$29.75	$25.50	($4.25)	-14.29%	$1.15	$1.37	$0.22	19.13%
Aged/Dual Eligible	379	381	2	0.53%	$28.60	$23.78	($4.82)	-16.85%	$0.90	$0.99	$0.09	10.00%
LTC/Non-Dual	0	0	0	0.00%	$0.00	$0.00	$0.00	0	$0.00	$0.00	$0.00	0.00%

2.4.4 DCMI.001 Frequency

This measure is applied annually, when the RDT is submitted. The service date range of the encounter data used will match the service date range of the submitted RDT.

2.4.5 DCMI.001 Change Log

Measure Version	Document Version	Author(s)	Effective Date	Description of Changes
1.0	1.0	T. Wright	1/1/2015	Initial version of measure.

2.5   DCMI.002 Compare Actual Visits to Adjusted Expected Visits

2.5.1 DCMI.002 Overview

This measure compares MCP Actual Visits to Expected Visits. Since each MCP has a different mix of beneficiaries, the expected number of visits reported for each plan is different. This measure adjusts the expected number based on the MCP's population.

A visit is the unique combination of billing provider ID, beneficiary ID, and DOS.

Both "Actual Visits" and "Expected Visits" are expressed as visits per 1,000 certified eligibles, per month, by encounter type.

"Actual Visits" are based on the encounter data submitted by the MCP.

 "Certified eligibles" are beneficiaries who either do not have a share of cost, or have met their share of cost for the month with an active enrollment status in the MCP.

"Expected Visits" are calculated from monthly statewide rates and the results are case-mix adjusted to match the MCP population. Monthly statewide rates are computed from the total number of visits for all plans per month, aid category, and encounter type. Total visits are divided by the number of certified eligibles for that month and aid category. These statewide rates are then multiplied by monthly MCP enrollment per aid category, summed at the encounter type level, divided by total MCP enrollment, and multiplied by 1,000.

The resulting "Expected Visits" represents the number of visits the plan would have reported if the plan reported exactly the statewide average number of visits per 1,000 beneficiaries within each Aid Category.

2.5.2 DCMI.002 Specifications

This analysis is stratified by type of encounter:

- Physician/Outpatient
- Pharmacy

The results are represented in a graph:

- **X-axis:** most recent 36 Months of Service
- **Y-axis:** number of visits

- **Adjusted expected visits:** number of visits in encounter data for that type of encounter per 1,000 beneficiaries in the aid code rollup for the entire state across all full-scope plans. This is calculated as follows:

  1. All certified eligible beneficiaries across all full-scope plans are stratified into distinct aid categories derived from the beneficiary aid code, Medicare status, and age. The groupings are (see Section 9 for the logic used to create these categories):
     - Adult & Family (18 and Under)
     - Adult & Family (Over 18)
     - Aged & Disabled / Non-dual
     - Disabled/Dual
     - Aged / Dual
     - BCCTP
     - LTC / Non-dual
     - LTC / Dual
     - Other

  2. Statewide number of visits per beneficiary per month is calculated for each aid category and encounter type.

  3. Beneficiaries within each plan are stratified into the same aid categories, and monthly enrollment is calculated for each category.

  4. Plan code-specific enrollments are multiplied by statewide rates per aid category, encounter type, and month of service, and then summed at the plan code, encounter type, and month of service level. This results in the expected number of visits.

  5. Expected number of visits is divided by the number of eligibles in the month and multiplied by 1,000.

- **Actual visits:** number of visits for that type of transaction per 1,000 beneficiaries for the specific plan code

2.5.3   DCMI.002 Mockup of Report

Actual Visits and Adjusted Expected Visits

Legend:
- Expected Phys/IP Visits per 1000 Members
- Actual Phys/OP Visits per 1000 Members
- Expected Rx Visits per 1000 Members
- Actual Rx Visits per 1000 Members
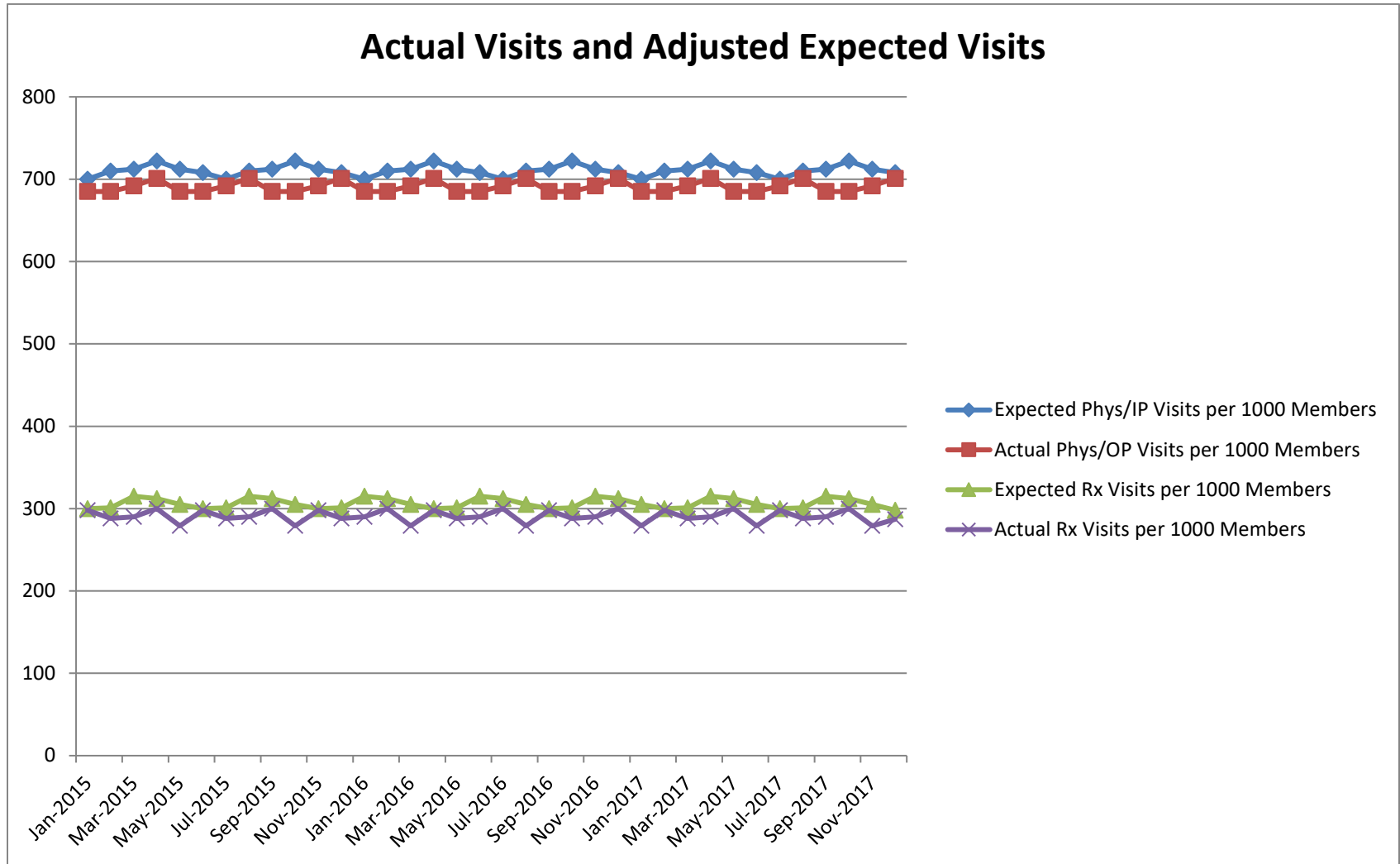
2.5.4 DCMI.002 Frequency

This measure is applied on an ad-hoc basis. When this measure is applied, it will have a 3-month lag. For example, in January 2015 this measure is run for the 36 months (by DOS) ending in September 2014.

2.5.5 DCMI.002 Change Log

Measure Version	Document Version	Author(s)	Effective Date	Description of Changes
1.0	1.0	A. Yamamoto	1/1/2015	Initial version of measure.

2.6　　　DCMI.003 Visits Trend Report

2.6.1　DCMI.003 Overview

This measure shows a trend line across 36 months, showing visits per month.

2.6.2　DCMI.003 Specifications

"Visits" are defined as the unique combination of billing provider, beneficiary, and DOS.

"Certified eligibles" are beneficiaries who either do not have a share of cost, or have met their share of cost for the month.

This analysis is stratified by type of encounter:

- Physician/Outpatient
- Pharmacy

The results are represented in a graph:

- **X-axis:** most recent 36 Months of Service
- **Y-axis:** number of visits

DHCS expects a smooth trend line for each type of submission.

2.6.3   DCMI.003 Mockup of Report

Rx Visits by Beneficiary Aid Category

Legend:
- Certified Eligibles
- RX Visits
- Phys/OP Visits
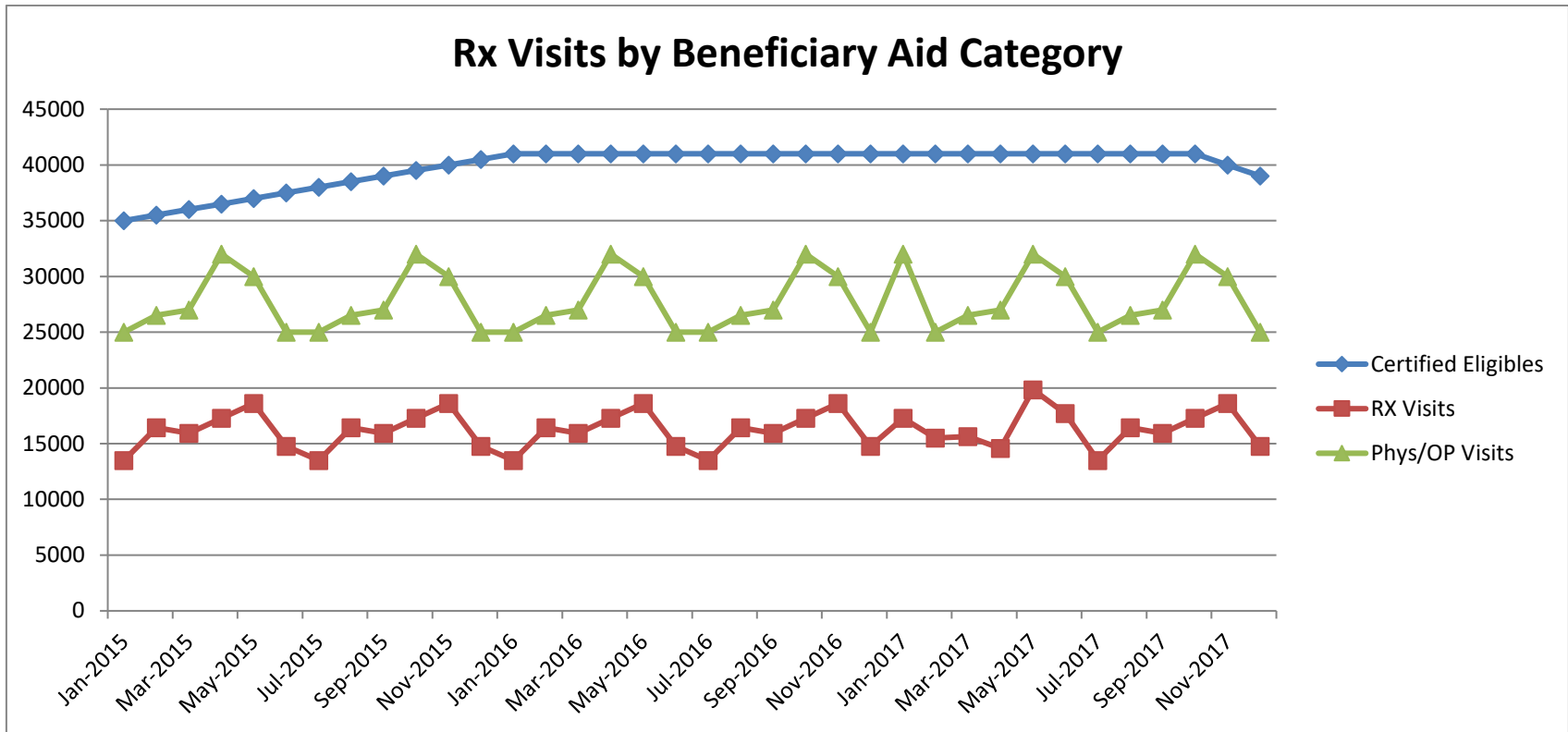
2.6.4 DCMI.003 Frequency

This measure is applied on an ad-hoc basis. When this measure is applied it will have a 3-month lag. For example, in January 2015 this measure would be run for the 36 months (by DOS) ending in September 2014.

2.6.5 DCMI.003 Change Log

Measure Version	Document Version	Author(s)	Effective Date	Description of Changes
1.0	1.0	T. Wright	1/1/2015	Initial version of measure.

3) Data Accuracy Measures

Data is accurate when it correctly depicts the real world events and entities that it purports to represent. The medical records of the Medi-Cal beneficiaries will be the standard against which encounter data will be measured.

Inaccurate data is of limited value for analysis and reporting, since analytic results will not represent reality.

Measure Number	Measure Name
Threshold Measures	
DAMT.001	Key Data Elements Match Medical Records (A&I)

3.1   DAMT.001 Key Data Elements Match Medical Records

3.1.1 DAMT.001 Overview

DHCS or its contracted External Quality Review Organization (EQRO) evaluates encounter data accuracy by performing a comparative analysis between the encounter data in the DHCS data warehouse and the data in the providers' medical records. This measure validates whether all key data elements match within data found in both the medical records and DHCS encounter data. Note that this measure analyzes the accuracy of the matched records found in measure DCMT.003.

3.1.2 DAMT.001 Specifications

This measure uses the matched records identified in measure DCMT.003. For all matched records, the following key data elements are compared between the medical records and DHCS encounter data.

Key data elements:

- Rendering Provider
- Diagnoses (all diagnoses relevant to the encounter – the medical record may include additional diagnoses that are not required in the encounter data)
- Procedure code

3.1.3 DAMT.001 Expected Outcome

No less than 80% of matched records have all key data elements matching between the medical records and the encounter data.

3.1.4 DAMT.001 Mockup of Report

Measure	Plan Code	Review Quarter	Results	Count of Matched Encounters	Count Matched All Key Data Elements	Percent Matched All Key Data Elements
DAMT.001	XXX	2015Q1	Pass	200	190	95.0%
DAMT.001	YYY	2015Q1	Fail	200	100	50.0%

3.1.5 DAMT.001 Frequency

This is an annual measure. It will be included in the quarterly summaries of the quarter in which the results become available.

3.1.6 DAMT.001 Change Log

Measure Version	Document Version	Author(s)	Effective Date	Description of Changes
1.0	1.0	L. Saengsavang	1/1/2015	Initial version of measure.
1.1	1.1	T. Akers	8/8/2018	Minor clarifying edits to the Overview, including replacing references to A&I with the EQRO.

4) Data Reasonability Measures

Data is reasonable when:

- The individual data are valid
- The data set taken as a whole is plausible

The individual data are *valid* when they are structured appropriately, only contain values that are allowed for the data elements, and pass basic edits.

The data set taken as a whole is *plausible* when statistical analysis of characteristics of the data conforms to expectations. Data plausibility is similar to data accuracy, but they are not identical. Plausibility is determined by statistical analysis of the data, where data accuracy is determined by ascertaining whether a sample of the data correctly describes the real world events. Data may appear reasonable, but still lack accuracy.

If a data element on an encounter requires NPI, and instead a name is reported in that data element, that encounter would be invalid.

If an encounter included a pregnancy-related diagnosis for a male beneficiary, that encounter is invalid. If all the encounters in a particular data set were individually valid, but analysis showed that a particular provider averaged 36 hours a day of office visits, that data set is implausible.

When data lacks reasonability, it is untrustworthy and difficult to use for analysis and reporting.

Measure Number	Measure Name
	Threshold Measures
DRMT.001	Denied Encounters Turnaround Time
	Information Only Measures
DRMI.001	Review of Procedure Code
DRMI.002	Procedures per Visit
DRMI.003	Procedure Modifiers and Procedure Codes

Measure Number	Measure Name
DRMI.004	Review of Revenue Codes
DRMI.005	Review of Diagnosis Codes
DRMI.006	Denied Encounters as a Percent of Total
DRMI.007	Voids and Replacements
DRMI.008	Review of Billing Provider Identifier
DRMI.009	Review of Rendering Provider Identifier
DRMI.010	Review of Referring Provider Identifier
DRMI.011	Review of Prescribing Provider Identifier

4.1 DRMT.001 Denied Encounters Turnaround Time

4.1.1 DRMT.001 Overview

This measure addresses how quickly denied encounters are corrected and resubmitted. The time between a denial and the correction and resubmission of corrected data is the turnaround time. This measure analyzes the percentage of corrections by turnaround time categories. This measure aggregates all transaction types.

Denied encounters are those that have failed the edit process and plans must correct them for resubmission to DHCS. While it is reasonable that some corrections have longer turnaround times, the expectation is that most corrections have a very short turnaround time.

4.1.2 DRMT.001 Specifications

Measure the turnaround time between the date an encounter was denied and the date its correcting encounter was submitted and accepted.

Date denied – the date that the Response File indicating denial of the encounter was made available to the Plan.

Date corrected – the date the file containing the acceptable correcting encounter is received by DHCS.

Denied encounters are calculated as follows:

Percentage of denied encounters = ((count of <u>denied</u> encounters)/(count of encounters received))*100

The data elements used to create links between these encounters are identified in DHCS' Companion Guides for X12 837 transactions and NCPDP Post-Adjudication Payer Sheets for encounter data.

4.1.3 DRMT.001 Expected Outcome

All of the following are expected to be true:

- 50% of denied encounters are corrected and submitted (and accepted) within 15 calendar days of being denied.
- 80% of denied encounters are corrected and submitted (and accepted) within 30 calendar days of being denied.
- 95% of denied encounters are corrected and submitted (and accepted) within 60 calendar days of being denied.

It is anticipated that there may be situations in which a denied encounter is uncorrectable. If the MCP fails the turnaround time criteria above but less than 5% of submitted encounters were denied, this measure is designated as "Informational Only" and not applied to the Encounter Data Quality Grade.

The table below summarizes the potential results for this measure:

	< 5% Denied	>= 5% Denied
Passed Criteria	PASS	PASS
Failed Criteria	Informational Only	FAIL

4.1.4 DRMT.001 Mockup of Report

Measure	Plan Code	Submission Quarter	Results	Total Submitted	Total Denied	Percent Denied	Percent 15 Days or Less	Percent 30 Days or Less	Percent 60 Days or Less
DRMT.001	XXX	2015Q1	Pass	100	20	20%	55%	85%	95%
DRMT.001	YYY	2015Q1	Fail	100	20	20%	15%	60%	65%

4.1.5 DRMT.001 Frequency

This measure is applied quarterly, with a 1-quarter lag, based on date of denial for the original submission. For example, in January 2015 this measure is run for dates of denial by DHCS in July, August, and September 2014.

4.1.6 DRMT.001 Change Log

Measure Version	Document Version	Author(s)	Effective Date	Description of Changes
1.0	1.0	T. Akers	1/1/2015	Initial version of measure.

4.2   DRMI.001 Review of Procedure Code

4.2.1 DRMI.001 Overview

DHCS expects procedures to be reported with valid national standard codes.

This includes data from Institutional (837I) and Professional (837P) transactions, and includes all submitted encounters, including both accepted and denied encounters.

4.2.2 DRMI.001 Specifications

1. **Percent of encounters with valid procedure code** = ((count of encounters populated with a valid national standard procedure code)/(count of encounters submitted))*100
2. **Percent of encounters with an unidentifiable procedure code** = ((count of encounters with an unidentifiable value in the procedure code field)/(count of all encounters submitted)))*100
3. **Percent of encounters with more than one procedure code** = ((count of encounters with more than one valid procedure code populated)/(count of all encounters submitted)*100
4. **Average number of procedure codes per encounter** = ((count of valid national standard procedure codes)/(count of all encounters submitted by that plan))

4.2.3 DRMI.001 Mockup of Report

Measure	Plan Code	Submission Quarter	Institutional				Professional			
			% Valid Standard Procedure Code	% Unidentifiable Procedure Code	% > 1 Procedure Code	Average Number of Procedure Codes Per Encounter	% Valid Standard Procedure Code	% Unidentifiable Procedure Code	% > 1 Procedure Code	Average Number of Procedure Codes Per Encounter
DRMI.001	XXX	2015Q1	97%	3%	20%	1	97%	3%	20%	1
DRMI.001	YYY	2015Q1	97%	3%	20%	1.2	97%	3%	20%	1.2

4.2.4 DRMI.001 Frequency

This measure is applied on an ad-hoc basis. When this measure is applied it will have a 1-month lag. For example, in January 2015, this measure would be run for dates of submission in October, November, and December 2014.

4.2.5 DRMI.001 Change Log

Measure Version	Document Version	Author(s)	Effective Date	Description of Changes
1.0	1.0	T. Meeker	1/1/2015	Initial version of measure.

4.3   DRMI.002 Procedures per Visit

4.3.1 DRMI.002 Overview

While some visits may have only a single procedure, many should have multiple procedures.

"Visits" are defined as the unique combination of billing provider, beneficiary, and DOS.

This includes data from Institutional (837I) and Professional (837P) transactions, and includes all submitted encounters, including both accepted and denied encounters.

4.3.2 DRMI.002 Specifications

1. **Average Number of Procedure Codes per Visit** = ((count of procedure codes)/(count of visits with a procedure code))
2. **Percent of Visits with One Procedure Code** = ((count of visits with one procedure code)/(count of visits)*100

4.3.3   DRMI.002 Mockup of Report

Measure	Plan Code	Submission Quarter	Institutional		Professional	
			Average Number of Procedure Codes per Visit	Percent of Visits with One Procedure Code	Average Number of Procedure Codes per Visit	Percent of Visits with One Procedure Code
DRMI.002	XXX	2015Q1	2.0	10%	2.0	8%
DRMI.002	YYY	2015Q1	2.4	3%	1.5	19%

4.3.4 DRMI.002 Frequency

This measure is applied on an ad-hoc basis. When this measure is applied it will have a 1-month lag. For example, in January 2015 this measure would be run for dates of submission in October, November, and December 2014.

4.3.5 DRMI.002 Change Log

Measure Version	Document Version	Author(s)	Effective Date	Description of Changes
1.0	1.0	T. Meeker	1/1/2015	Initial version of measure.

4.4   DRMI.003 Procedure Modifiers and Procedure Codes

4.4.1 DRMI.003 Overview

While some procedure codes may not be reported with a modifier, in many cases a modifier is necessary for a complete understanding of the service provided.

This includes data from Institutional (837I) and Professional (837P) transactions, and includes all submitted encounters, including both accepted and denied encounters.

4.4.2 DRMI.003 Specifications

1. **Percent of procedures that include one or more modifiers** = ((count of service lines with one or more procedure modifiers)/(count of service lines with a procedure code))*100
2. **Average number of modifiers per procedure code** = ((count of procedure modifiers)/(count of service lines with a procedure code))

4.4.3 DRMI.003 Mockup of Report

Measure	Plan Code	Submission Quarter	Institutional		Professional	
			% Procedures Codes that include one or more modifiers	Average Number of Modifiers per Procedure Code	% Procedures Codes that include one or more modifiers	Average Number of Modifiers per Procedure Code
DRMI.003	XXX	2015Q1	97%	1.2	97%	1.2
DRMI.003	YYY	2015Q1	97%	0.7	97%	0.7

4.4.4 DRMI.003 Frequency

This measure is applied on an ad-hoc basis. When this measure is applied it will have a 1-month lag. For example, in January 2015 this measure is run for dates of submission in October, November, and December 2014.

4.4.5 DRMI.003 Change Log

Measure Version	Document Version	Author(s)	Effective Date	Description of Changes
1.0	1.0	T. Meeker	1/1/2015	Initial version of measure.

4.5   DRMI.004 Review of Revenue Codes

4.5.1   DRMI.004 Overview

DHCS expects revenue codes to be reported using valid national standard codes. While some encounters may have only a single revenue code, many should have multiple revenue codes.

This includes data from Institutional (837I) transactions, and includes all submitted encounters, including both accepted and denied encounters.

4.5.2   DRMI.004 Specifications

1. **Percent of encounters with valid revenue code** = ((count of encounters populated with a valid national standard revenue code)/(count of all encounters submitted))*100
2. **Percent of encounters with an unidentifiable revenue code =** ((count of encounters with an unidentifiable value in the revenue code field)/(count of all encounters submitted))*100
3. **Percent of encounters with more than one revenue code** = ((count of encounters with more than one revenue code)/(count of all encounters submitted)*100
4. **Average number of revenue codes per encounter** = ((count of valid national standard revenue codes)/(count of all encounters submitted))

4.5.3 DRMI.004 Mockup of Report

Measure	Plan Code	Submission Quarter	% Valid Standard Revenue Code	% Unidentifiable Revenue Code	% > 1 Revenue Code	Average Number of Revenue Codes Per Encounter
DRMI.004	XXX	2015Q1	97%	3%	20%	1
DRMI.004	YYY	2015Q1	97%	3%	20%	1.2

4.5.4 DRMI.004 Frequency

This measure is applied on an ad-hoc basis. When this measure is applied it will have a 1-month lag. For example, in January 2015 this measure would be run for dates of submission in October, November, and December 2014.

4.5.5 DRMI.004 Change Log

Measure Version	Document Version	Author(s)	Effective Date	Description of Changes
1.0	1.0	T. Meeker	1/1/2015	Initial version of measure.

4.6   DRMI.005 Review of Diagnosis Codes

4.6.1 DRMI.005 Overview

DHCS expects diagnosis codes to be reported using valid national standard codes. While some encounters may have only a single diagnosis code, many should have multiple diagnosis codes.

This includes data from Institutional (837I) and Professional (837P) transactions, and includes all submitted encounters, including both accepted and denied encounters.

4.6.2 DRMI.005 Specifications

1. **Percent of encounters with valid diagnosis code** = ((count of encounters populated with a valid national standard diagnosis code)/(count of all encounters submitted))*100
2. **Percent of encounters with an unidentifiable diagnosis code** = ((count of encounters with an unidentifiable value in the diagnosis code field)/(count of all encounters submitted))*100
3. **Percent of encounters with more than one diagnosis code** = ((count of encounters with more than one valid national standard diagnosis code populated)/(count of all encounters submitted))*100
4. **Average number of diagnosis codes per encounter** = ((count of valid national standard diagnosis codes)/(count of all encounters submitted by that plan))

4.6.3 DRMI.005 Mockup of Report

Measure	Plan Code	Submission Quarter	Institutional				Professional			
			% Valid Standard Diagnosis Code	% Unidentifiable Diagnosis Code	% > 1 Diagnosis Code	Average Number of Diagnosis Codes Per Encounter	% Valid Standard Diagnosis Code	% Unidentifiable Diagnosis Code	% > 1 Diagnosis Code	Average Number of Diagnosis Codes Per Encounter
DRMI.005	XXX	2015Q1	97%	3%	20%	1	97%	3%	20%	1
DRMI.005	YYY	2015Q1	97%	3%	20%	1.2	97%	3%	20%	1.2

4.6.4 DRMI.005 Frequency

This measure is applied on an ad-hoc basis. When this measure is applied it will have a 1-month lag. For example, in January 2015 this measure would be run for dates of submission in October, November, and December 2014.

4.6.5 DRMI.005 Change Log

Measure Version	Document Version	Author(s)	Effective Date	Description of Changes
1.0	1.0	T. Meeker	1/1/2015	Initial version of measure.

4.7 DRMI.006 Denied Encounters as a Percent of Total

4.7.1 DRMI.006 Overview

This measure reports the percentage of total encounters that are denied, by transaction type, for each month of submission. A "denied encounter" contains one or more fields with errors and is considered invalid. As a result, the encounter is not accepted at the time of file submission.

Measure values are determined by dividing the number of denied encounters by the total number of encounters submitted during the period. The result is multiplied by 100 to arrive at the percentage of denied encounters.

4.7.2 DRMI.006 Specifications

Calculate the percentage of total encounters submitted that are denied:

Percentage of denied encounters = ((count of <u>denied</u> encounters)/(count of encounters received))*100

This report is stratified by type of transaction:
- Institutional
- Professional
- Pharmacy

4.7.3 DRMI.006 Mockup of Report

Measure	Plan Code	Submission Quarter	Institutional			Professional			Pharmacy		
			Received	Denied	Denied %	Received	Denied	Denied %	Received	Denied	Denied %
DRMI.006	XXX	2015Q1	1000	100	10%	200	14	7%	300	15	5%
DRMI.006	YYY	2015Q1	300	15	5%	1000	100	10%	200	14	7%

4.7.4 DRMI.006 Frequency

This measure is applied on an ad-hoc basis. When this measure is applied it will have a 1-month lag. For example, in January 2015 this measure would be run for dates of submission in October, November, and December 2014.

4.7.5 DRMI.006 Change Log

Measure Version	Document Version	Author(s)	Effective Date	Description of Changes
1.0	1.0	A. Yamamoto	1/1/2015	Initial version of measure.

4.8 DRMI.007 Voids and Replacements

4.8.1 DRMI.007 Overview

All transaction types are expected to have some voids and replacements; however, pharmacy encounters generally have the fewest adjustments.

4.8.2 DRMI.007 Specifications

1. **Institutional Percent of Void Encounters** = ((count of Institutional void encounters)/(count of all Institutional encounters received))*100

2. **Institutional Percent of Replacement Encounters** = ((count of Institutional replacement encounters received)/(count of all Institutional encounters received))*100

3. **Professional Percent of Void Encounters** = ((count of Professional void encounters)/(count of all Professional encounters received))*100

4. **Professional Percent of Replacement Encounters** = ((count of Professional replacement encounters received)/(count of all Professional encounters received))*100

5. **Pharmacy Percent of Void Encounters** = ((count of Pharmacy void encounters)/(count of all Pharmacy encounters received))*100

6. **Pharmacy Percent of Replacement Encounters** = ((count of Pharmacy replacement encounters received)/(count of all Pharmacy encounters received))*100

4.8.3 DRMI.007 Mockup of Report

Measure	Plan Code	Submission Quarter	Institutional		Professional		Pharmacy	
			% Void Encounters	% Replacement Encounters	% Void Encounters	% Replacement Encounters	% Void Encounters	% Replacement Encounters
DRMI.007	XXX	2015Q1	5%	7%	2%	8%	2%	1%
DRMI.007	YYY	2015Q1	12%	12%	12%	5%	10%	3%

4.8.4 DRMI.007 Frequency

This measure is applied on an ad-hoc basis. When this measure is applied it will have a 1-month lag. For example, in January 2015 this measure is run for encounters with dates of submission in October, November, and December 2014.

4.8.5 DRMI.007 Change Log

Measure Version	Document Version	Author(s)	Effective Date	Description of Changes
1.0	1.0	T. Meeker	1/1/2015	Initial version of measure.

4.9   DRMI.008 Review of Billing Provider Identifier

4.9.1   DRMI.008 Overview

DHCS expects billing providers to be reported with a valid NPI. While some encounters may have the same billing provider and rendering provider, many should have different IDs reported in these data elements.

When an Organizational NPI is used for billing provider ID, generally an Individual NPI is expected in the rendering provider ID.

This includes data from Institutional (837I) and Professional (837P) transactions, and includes all submitted encounters, including both accepted and denied encounters.

4.9.2   DRMI.008 Specifications

1. **Percent of encounters with Billing Provider Identifier NPI**= ((count of encounters with Billing Provider Identifier populated with NPI)/(count of all encounters))*100
2. **Percent of encounters with the same Billing Provider Identifier and Rendering Provider Identifier** = ((count of encounters where Billing Provider ID = Rendering Provider Identifier)/(count of all encounters))*100
3. **Percent of encounters where the Billing Provider ID & Rendering Provider ID both have a an organizational NPI** = ((count of encounters where the NPI type = organization for both Billing Provider Identifier and Rendering Provider Identifier)/(count of all encounters)*100
4. **Percent of encounters with a valid Billing Provider Identifier but a blank or invalid Rendering Provider Identifier** = ((count of encounters where Billing Provider Identifier is valid and Rendering Provider Identifier is blank or invalid)/(count of all encounters))*100

4.9.3 DRMI.008 Mockup of Report

Measure	Plan Code	Submission Quarter	Institutional				Professional			
			% Billing Provider NPI	% Billing Provider ID = Rendering Provider ID	% both Billing Provider ID & Rendering Provider ID are organizational NPI	% valid Billing Provider ID and blank or invalid Rendering Provider ID	% Billing Provider NPI	% Billing Provider ID = Rendering Provider ID	% both Billing Provider ID & Rendering Provider ID are organizational NPI	% valid Billing Provider ID and blank or invalid Rendering Provider ID
DRMI.008	XXX	2015Q1	90%	12%	10%	32%	81%	12%	22%	12%
DRMI.008	YYY	2015Q1	89%	15%	22%	12%	95%	5%	10%	32%

4.9.4 DRMI.008 Frequency

This measure is applied on an ad-hoc basis. When this measure is applied it will have a 1-month lag. For example, in January 2015 this measure would be run for dates of submission in October, November, and December 2014

4.9.5 DRMI.008 Change Log

Measure Version	Document Version	Author(s)	Effective Date	Description of Changes
1.0	1.0	T. Meeker	1/1/2015	Initial version of measure.

4.10   DRMI.009 Review of Rendering Provider Identifier

4.10.1 DRMI.009 Overview

DHCS expects rendering providers to be reported with a valid NPI. Rendering provider ID should not be the same as referring provider ID. Rendering provider ID should generally not be an Organizational NPI.

Note that this measure uses service lines, not encounters ("claims" in 837I or 837P), as the unit of analysis. This includes all submitted encounters, including both accepted and denied encounters.

4.10.2 DRMI.009 Specifications

1. **Percent of service lines with Rendering Provider Identifier NPI =** ((count of service lines with Rendering Provider Identifier populated with NPI)/(count of all service lines))*100
2. **Percent of service lines with the same Rendering and Referring Provider Identifiers** = ((count of service lines with Rendering Provider Identifier = Referring Provider Identifier)/(count of all service lines))*100
3. **Percent of service lines where Rendering Provider Identifier is an Organizational NPI** = ((count of service lines where NPI type of Rendering Provider Identifier = Organizational)/(count of all service lines))*100

4.10.3 DRMI.009 Mockup of Report

Measure	Plan Code	Submission Quarter	Institutional			Professional		
			% Rending Provider NPI	% Rendering Provider ID = Referring Provider ID	% Rendering Provider ID is organizational NPI	% Rending Provider NPI	% Rendering Provider ID = Referring Provider ID	% Rendering Provider ID is organizational NPI
DRMI.009	XXX	2015Q1	95%	5%	10%	81%	12%	22%
DRMI.009	YYY	2015Q1	81%	12%	22%	95%	5%	10%

4.10.4 DRMI.009 Frequency

This measure is applied on an ad-hoc basis. When this measure is applied it will have a 1-month lag. For example, in January 2015, this measure would be run for dates of submission in October, November, and December 2014.

4.10.5 DRMI.009 Change Log

Measure Version	Document Version	Author(s)	Effective Date	Description of Changes
1.0	1.0	T. Meeker	1/1/2015	Initial version of measure.

4.11 DRMI.010 Review of Referring Provider Identifier

4.11.1 DRMI.010 Overview

DHCS expects referring providers to be reported with a valid NPI. Referring provider ID should not be the same as billing provider ID.

This includes data from Institutional (837I) and Professional (837P) transactions, and includes all submitted encounters, including both accepted and denied encounters.

4.11.2 DRMI.010 Specifications

1. **Percent of encounters with Referring Provider Identifier populated with NPI** = ((count of encounters with Referring Provider Identifier populated with NPI)/(count of all encounters))*100
2. **Percent of encounters with Referring Provider Identifier populated, not NPI** = ((count of encounters with Referring Provider Identifier populated with non-NPI)/(count of all encounters))*100
3. **Percent of encounters with Referring Provider Identifier the same as Billing Provider Identifier** = ((count of encounters with Referring Provider Identifier = Billing Provider identifier)/(count of all encounters)*100

4.11.3 DRMI.010 Mockup of Report

Measure	Plan Code	Submission Quarter	Institutional			Professional		
			% Referring Provider NPI	% Referring Provider, Not NPI	% Referring Provider = Billing Provider	% Referring Provider NPI	% Referring Provider, Not NPI	% Referring Provider = Billing Provider
DRMI.010	XXX	2015Q1	95%	5%	10%	81%	12%	22%
DRMI.010	YYY	2015Q1	81%	12%	22%	95%	5%	10%

4.11.4 DRMI.010 Frequency

This measure is applied on an ad-hoc basis. When this measure is applied it will have a 1-month lag. For example, in January 2015, this measure would be run for dates of submission in October, November, and December 2014.

4.11.5 DRMI.010 Change Log

Measure Version	Document Version	Author(s)	Effective Date	Description of Changes
1.0	1.0	T. Meeker	1/1/2015	Initial version of measure.

4.12   DRMI.011 Review of Prescribing Provider Identifier

4.12.1 DRMI.011 Overview

DHCS expects prescribing providers to be reported with a valid NPI. Prescribing provider ID should not be the same as service provider ID.

This includes data from Pharmacy (NCPDP) transactions, and includes all submitted encounters, including both accepted and denied encounters.

4.12.2 DRMI.011 Specifications

1. **Percent of encounters with Prescribing Provider Identifier populated with NPI** = ((count of encounters with Prescribing Provider Identifier populated with NPI)/(count of all encounters))*100
2. **Percent of encounters with Prescribing Provider Identifier populated, not NPI** = ((count of encounters with Prescribing Provider Identifier populated with non-NPI)/(count of all encounters))*100
3. **Percent of encounters with Prescribing Provider Identifier not present** = ((count of encounters with Prescribing Provider Identifier not present)/(count of all encounters))*100
4. **Percent of encounters with Prescribing Provider Identifier the same as Service Provider Identifier** = ((count of encounters where Prescribing Provider Identifier = Service Provider Identifier)/(count of all encounters))*100

4.12.3 DRMI.011 Mockup of Report

Measure	Plan Code	Submission Quarter	% Prescribing Provider NPI	% Prescribing Provider not NPI	% Prescribing Provider not Present	% Prescribing Provider = Service Provider
DRMI.011	XXX	2015Q1	95%	5%	0%	32%
DRMI.011	YYY	2015Q1	81%	12%	7%	12%

4.12.4 DRMI.011 Frequency

This measure is applied on an ad-hoc basis. When this measure is applied it will have a 1-month lag. For example, in January 2015, this measure would be run for dates of submission in October, November, and December 2014.

4.12.5 DRMI.011 Change Log

Measure Version	Document Version	Author(s)	Effective Date	Description of Changes
1.0	1.0	T. Meeker	1/1/2015	Initial version of measure.

5) Data Timeliness Measures

Data is timely when the span of time between the occurrence of a real world event and its appearance in the data is short enough that the occurrence can be included in data analysis and reports. In this case, the date the real world event occurred is the Date of Service (DOS) of the encounter, and the date when the event is considered part of the data is the Submission Date to DHCS. The number of calendar days between those dates is the "lagtime".

Data completeness and data timeliness are closely related, but not identical.

If the average lagtime is excessive, even if data completeness is eventually achieved, it becomes difficult to use the data for timely analysis and reporting.

Measure Number	Measure Name
Threshold Measures	
DTMT.001	Categories of Lagtime Institutional
DTMT.002	Categories of Lagtime Professional
DTMT.003	Categories of Lagtime Pharmacy
Information Only Measures	
DTMI.001	Average Lagtime by Service Date Institutional
DTMI.002	Average Lagtime by Service Date Professional
DTMI.003	Average Lagtime by Service Date Pharmacy
DTMI.004	Average Lagtime by Submission Date Institutional
DTMI.005	Average Lagtime by Submission Date Professional
DTMI.006	Average Lagtime by Submission Date Pharmacy

5.1   DTMT.001 Categories of Lagtime Institutional

5.1.1   DTMT.001 Overview

This measure reports the lagtime for submitting Institutional encounter data. Lagtime is the time, in days, between the DOS and the Submission Date to DHCS. It analyzes the percentage of encounters by lag category. While it is reasonable for some encounters to have longer lagtimes, the expectation is that most encounters have shorter lagtimes.

5.1.2   DTMT.001 Specifications

This measure creates a table showing the percentage of submitted encounters in each of four lag categories. The four lag categories are:
- % encounters where lagtime is zero to 90 days
- % encounters where lagtime is zero to 180 days
- % encounters where lagtime is zero to 365 days
- % encounters where lagtime is greater than 365 days

Lagtime is measured as the length of time between DOS and Submission Date to DHCS.

Submission Date refers to the date on which DHCS received the encounter record from the MCP.

DOS refers to claim level "Last Date of Service", if null, use claim level "First Date of Service".

5.1.3   DTMT.001 Expected Outcome

The lagtime in the encounter data is at or higher than the thresholds in the table below, except for the last column, where the encounter data is at or below the threshold in the table.

	Lag of 0 to 90 Days	Lag of 0 to 180 Days	Lag of 0 to 365 Days	Lag > 365 Days
Institutional	60%	80%	95%	5%

5.1.4 DTMT.001 Mockup of Report

Measure	Plan Code	Submission Quarter	Results	Lag of 0 to 90 Days	Lag of 0 to 180 Days	Lag of 0 to 365 Days	Lag > 365 Days
DTMT.001	XXX	2015Q1	Pass	60%	80%	95%	5%
DTMT.001	YYY	2015Q1	Fail	59%	79%	94%	6%

5.1.5 DTMT.001 Frequency

This measure is applied quarterly, with a 1-month lag. For example, in January 2015 this measure is run for dates of submission in October, November, and December 2014.

5.1.6 DTMT.001 Change Log

Measure Version	Document Version	Author(s)	Effective Date	Description of Changes
1.0	1.0	J. Wang	1/1/2015	Initial version of measure.

5.2 DTMT.002 Categories of Lagtime Professional

5.2.1 DTMT.002 Overview

This measure reports the lagtime for submitting Professional encounter data. Lagtime is the time, in days, between the DOS and the Submission Date to DHCS. It analyzes the percentage of encounters by lag category. While it is reasonable that some encounters have longer lagtimes, the expectation is that most encounters have shorter lagtimes.

5.2.2 DTMT.002 Specifications

This measure creates a table showing the percentage of submitted encounters in each of four lag categories. The four lag categories are:
- % encounters where lagtime is zero to 90 days
- % encounters where lagtime is zero to 180 days
- % encounters where lagtime is zero to 365 days
- % encounters where lagtime is greater than 365 days

Lagtime is measured as the length of time between DOS and Submission Date to DHCS.

Submission Date refers to the date on which DHCS received the encounter record from the MCP.

DOS refers to claim level "Last Date of Service", if null, use claim level "First Date of Service".

5.2.3 DTMT.002 Expected Outcome

The lagtime in the encounter data is at or higher than the thresholds in the table below, except for the last column, where the encounter data is at or below the threshold in the table.

	Lag of 0 to 90 Days	Lag of 0 to 180 Days	Lag of 0 to 365 Days	Lag > 365 Days
Professional	65%	80%	95%	5%

5.2.4 DTMT.002 Mockup of Report

Measure	Plan Code	Submission Quarter	Results	Lag of 0 to 90 Days	Lag of 0 to 180 Days	Lag of 0 to 365 Days	Lag > 365 Days
DTMT.002	XXX	2015Q1	Pass	65%	80%	95%	5%
DTMT.002	YYY	2015Q1	Fail	59%	79%	94%	6%

5.2.5   DTMT.002 Frequency

This measure is applied quarterly, with a 1-month lag. For example, in January 2015 this measure is run for dates of submission in October, November, and December 2014.

5.2.6   DTMT.002 Change Log

Measure Version	Document Version	Author(s)	Effective Date	Description of Changes
1.0	1.0	J. Wang	1/1/2015	Initial version of measure.

5.3   DTMT.003 Categories of Lagtime Pharmacy

5.3.1 DTMT.003 Overview

This measure reports the lagtime for submitting Pharmacy encounter data. Lagtime is the time, in days, between the DOS and the Submission Date to DHCS. It analyzes the percentage of encounters by lag category. While it is reasonable that some encounters have longer lagtimes, the expectation is that most encounters have shorter lagtimes.

5.3.2 DTMT.003 Specifications

This measure creates a table showing the percentage of submitted encounters in each of four lag categories. The four lag categories are:

- % encounters where lagtime is zero to 90 days
- % encounters where lagtime is zero to 180 days
- % encounters where lagtime is zero to 365 days
- % encounters where lagtime is greater than 365 days

Lagtime is measured as the length of time between DOS and Submission Date to DHCS.

Submission Date refers to the date on which DHCS received the encounter record from the MCP.

DOS refers to "Date of Service".

5.3.3 DTMT.003 Expected Outcome

The lagtime in the encounter data is at or higher than the thresholds in the table below, except for the last column, where the encounter data is at or below the threshold in the table.

	Lag of 0 to 90 Days	Lag of 0 to 180 Days	Lag of 0 to 365 Days	Lag > 365 Days
Pharmacy	80%	95%	99%	1%

5.3.4 DTMT.003 Mockup of Report

Measure	Plan Code	Submission Quarter	Results	Lag of 0 to 90 Days	Lag of 0 to 180 Days	Lag of 0 to 365 Days	Lag > 365 Days
DTMT.003	XXX	2015Q1	Pass	80%	95%	99%	1%
DTMT.003	YYY	2015Q1	Fail	59%	79%	94%	6%

5.3.5 DTMT.003 Frequency

This measure is applied quarterly, with a 1-month lag. For example, in January 2015 this measure is run for dates of submission in October, November, and December 2014.

5.3.6 DTMT.003 Change Log

Measure Version	Document Version	Author(s)	Effective Date	Description of Changes
1.0	1.0	J. Wang	1/1/2015	Initial version of measure.

5.4   DTMI.001 Average Lagtime by Service Date Institutional

5.4.1 DTMI.001 Overview

This measure reports the average lagtime for Institutional encounters, and illustrates trends by service date across 36 months of data.

5.4.2 DTMI.001 Specifications

Lagtime is measured as the length of time between DOS and Submission Date to DHCS.

Submission Date refers to the date on which DHCS received the encounter record from the MCP.

DOS refers to claim level "Last Date of Service", if null, use claim level "First Date of Service".

X-axis: most recent 36 Months of Service

Y-axis: Average Lagtime

Plot the average lagtime, in calendar days, for all encounters in each service month.

5.4.3 DTMI.001 Mockup of Report
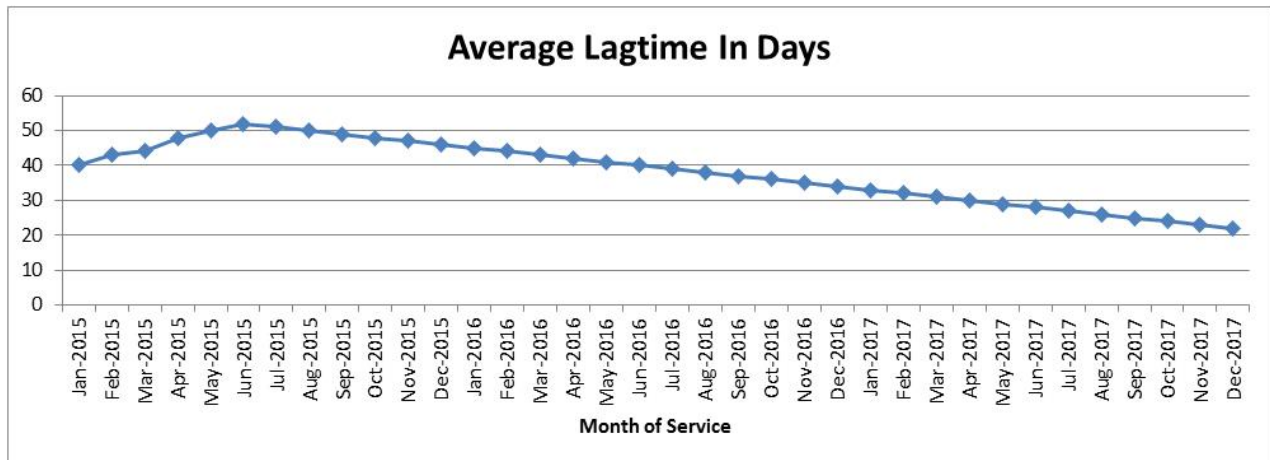
5.4.4 DTMI.001 Frequency

This measure is applied on an ad-hoc basis. When this measure is applied it will have a 12-month lag. For example, in January 2016 this measure would run for dates of service in January 2012 through December 2014.

5.4.5 DTMI.001 Change Log

Measure Version	Document Version	Author(s)	Effective Date	Description of Changes
1.0	1.0	J. Wang	1/1/2015	Initial version of measure.

5.5   DTMI.002 Average Lagtime by Service Date Professional

5.5.1   DTMI.002 Overview

This measure reports the average lagtime for Professional encounters, and illustrates trends by service date across 36 months of data.

5.5.2   DTMI.002 Specifications

Lagtime is measured as the length of time between DOS and Submission Date to DHCS.

Submission Date refers to the date on which DHCS received the encounter record from the MCP.

DOS refers to claim level "Last Date of Service", if null, use claim level "First Date of Service".

X-axis: most recent 36 Months of Service

Y-axis: Average Lagtime

Plot the average lagtime, in calendar days, for all encounters in each service month.

5.5.3   DTMI.002 Mockup of Report
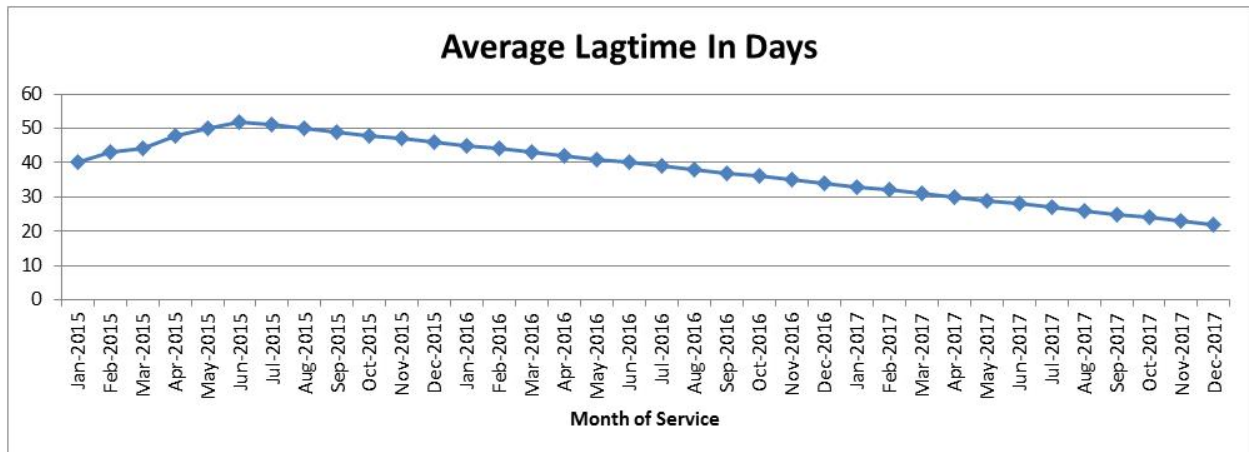
5.5.4   DTMI.002 Frequency

This measure is applied on an ad-hoc basis. When this measure is applied it will have a 12-month lag. For example, in January 2016 this measure would run for dates of service in January 2012 through December 2014.

5.5.5 DTMI.002 Change Log

Measure Version	Document Version	Author(s)	Effective Date	Description of Changes
1.0	1.0	J. Wang	1/1/2015	Initial version of measure.

5.6   DTMI.003 Average Lagtime by Service Date Pharmacy

5.6.1   DTMI.003 Overview

This measure reports the average lagtime for Pharmacy encounters, and illustrates trends by service date across 36 months of data.

5.6.2   DTMI.003 Specifications

Lagtime is measured as the length of time between DOS and Submission Date to DHCS.

Submission Date refers to the date on which DHCS received the encounter record from the MCP.

DOS refers to "Date of Service"

X-axis: most recent 36 Months of Service

Y-axis: Average Lagtime

Plot the average lagtime, in calendar days, for all encounters in each service month.

5.6.3   DTMI.003 Mockup of Report
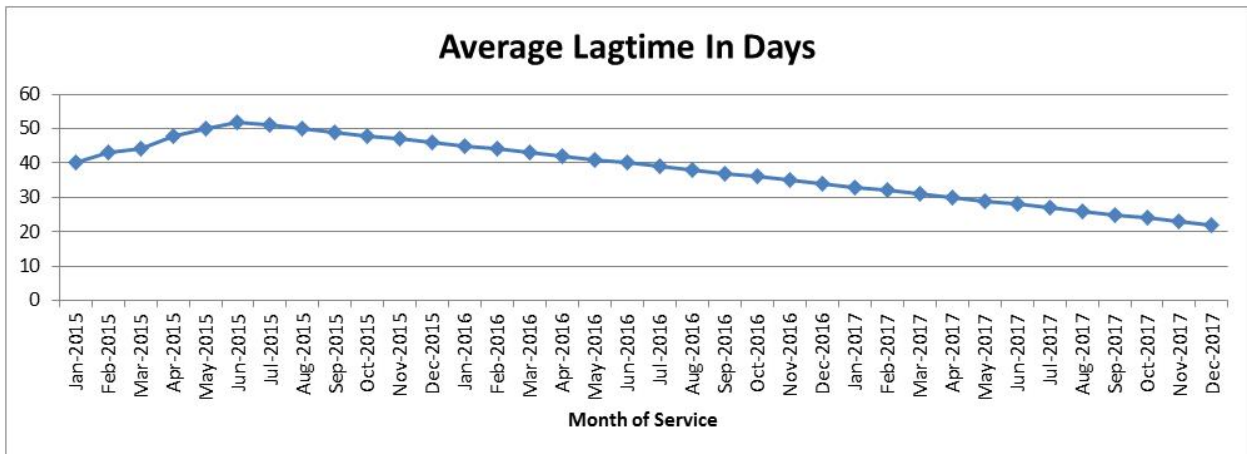
5.6.4   DTMI.003 Frequency

This measure is applied on an ad-hoc basis. When this measure is applied it will have a 12-month lag. For example, in January 2016 this measure would run for dates of service in January 2012 through December 2014.

5.6.5   DTMI.003 Change Log

Measure Version	Document Version	Author(s)	Effective Date	Description of Changes
1.0	1.0	J. Wang	1/1/2015	Initial version of measure.

5.7   DTMI.004 Average Lagtime by Submission Date Institutional

5.7.1 DTMI.004 Overview

This measure reports the average lagtime for Institutional encounters, and illustrates trends by submission date across 36 months of data.

5.7.2 DTMI.004 Specifications

Lagtime is measured as the length of time between DOS, and Submission Date to DHCS.

**Submission Date** refers to the date on which DHCS received the encounter record from the MCP.

DOS refers to claim level "Last Date of Service", if null, use claim level "First Date of Service".

X-axis: most recent 36 Months of Submission

Y-axis: Average Lagtime

Plot the average lagtime, in calendar days, for all encounters in each submission month.

5.7.3 DTMI.004 Mockup of Report
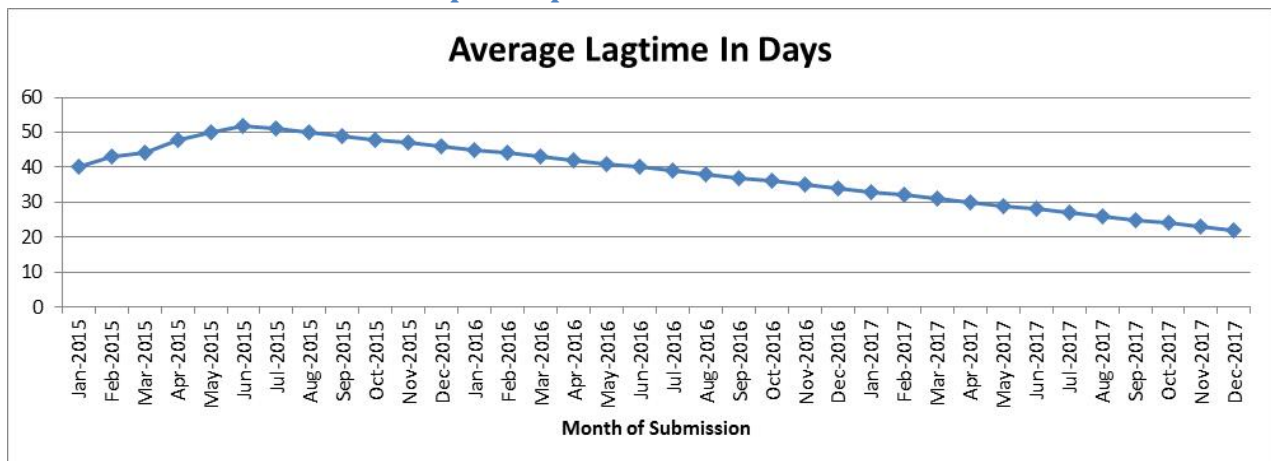
5.7.4 DTMI.004 Frequency

This measure is applied on an ad-hoc basis. When this measure is applied it will have a 1-month lag. For example, in January 2016 this measure would run for dates of submission in January 2013 through December 2015.

5.7.5 DTMI.004 Change Log

Measure Version	Document Version	Author(s)	Effective Date	Description of Changes
1.0	1.0	J. Wang	1/1/2015	Initial version of measure.

5.8   DTMI.005 Average Lagtime by Submission Date Professional

5.8.1 DTMI.005 Overview

This measure reports the average lagtime for Professional encounters, and illustrates trends by submission date across 36 months of data.

5.8.2 DTMI.005 Specifications

Lagtime is measured as the length of time between DOS, and Submission Date to DHCS.

Submission Date refers to the date on which DHCS received the encounter record from the MCP.

DOS refers to claim level "Last Date of Service", if null, use claim level "First Date of Service".

X-axis: most recent 36 Months of Submission

Y-axis: Average Lagtime

Plot the average lagtime, in calendar days, for all encounters in each submission month.

5.8.3 DTMI.005 Mockup of Report
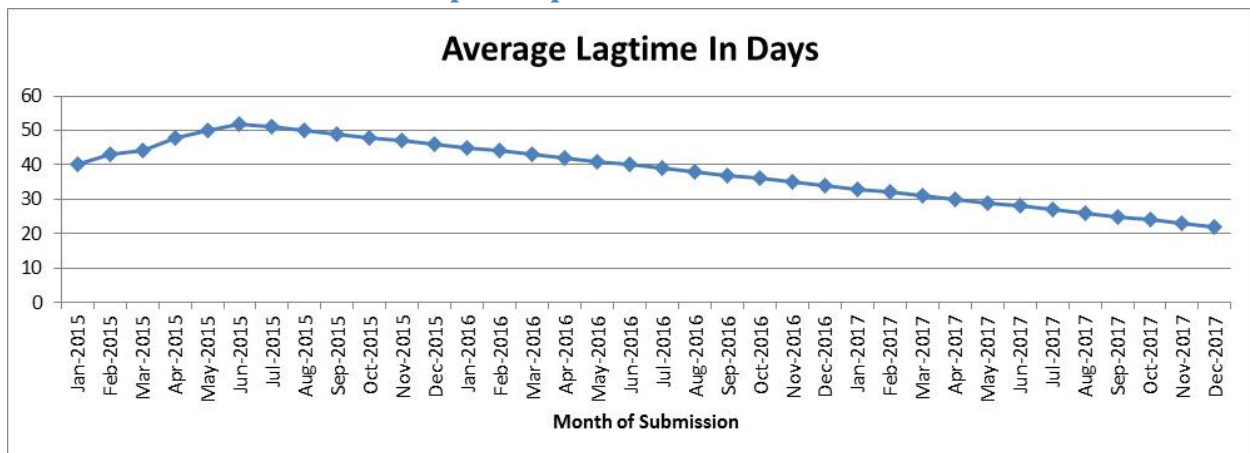
5.8.4 DTMI.005 Frequency

This measure is applied on an ad-hoc basis. When this measure is applied it will have a 1-month lag. For example, in January 2016 this measure would run for dates of submission in January 2013 through December 2015.

5.8.5 DTMI.005 Change Log

Measure Version	Document Version	Author(s)	Effective Date	Description of Changes
1.0	1.0	J. Wang	1/1/2015	Initial version of measure.

5.9   DTMI.006 Average Lagtime by Submission Date Pharmacy

5.9.1 DTMI.006 Overview

This measure reports the average lagtime for Pharmacy encounters, and illustrates trends by submission date across 36 months of data.

5.9.2 DTMI.006 Specifications

Lagtime is measured as the length of time between DOS, and Submission Date to DHCS.

Submission Date refers to the date on which DHCS received the encounter record from the MCP.

DOS refers to "Date of Service"

X-axis: most recent 36 Months of Submission

Y-axis: Average Lagtime

Plot the average lagtime, in calendar days, for all encounters in each submission month.

5.9.3 DTMI.006 Mockup of Report
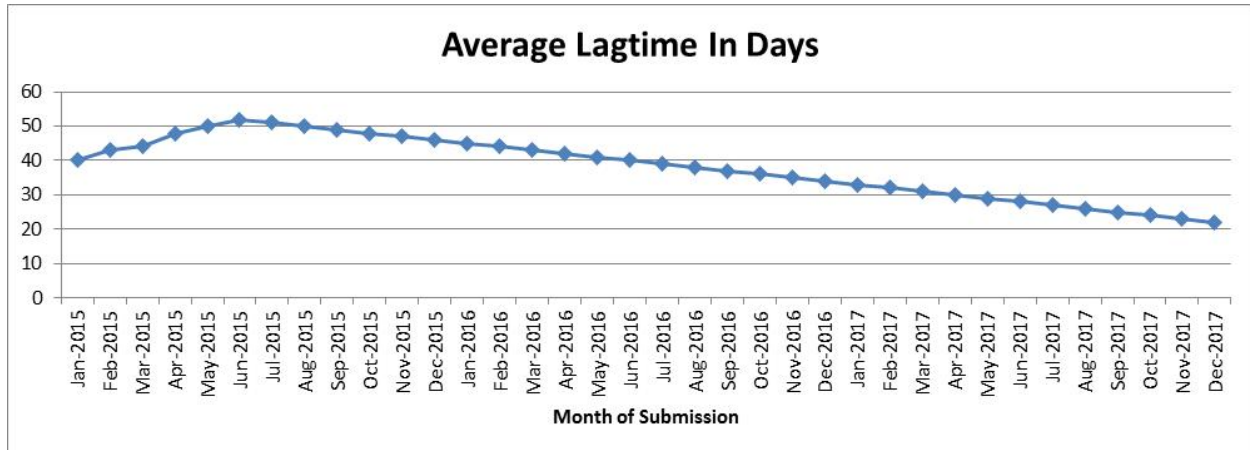
5.9.4 DTMI.006 Frequency

This measure is applied on an ad-hoc basis. When this measure is applied it will have a 1-month lag. For example, in January 2016 this measure would run for dates of submission in January 2013 through December 2015.

5.9.5 DTMI.006 Change Log

Measure Version	Document Version	Author(s)	Effective Date	Description of Changes
1.0	1.0	J. Wang	1/1/2015	Initial version of measure.

6) Encounter Data Quality Summaries

There are three principle summaries created from the results of the measures:

- Encounter Data Quality Grade (EDQG)
- Normalized Encounter Data Quality Grade (NEDQG)
- Encounter Data Grade Point Average (ED-GPA)

These are defined as:

- EDQG: calculated quarterly for each Managed Care Plan county (Plan Code) using all Threshold Measures from that quarter
- NEDQG: calculated quarterly for each Managed Care Plan county (Plan Code) using all Threshold Measures from that quarter except measures that are based on audits (DCMT.003 and DAMT.001).
- ED-GPA: calculated quarterly for each Managed Care Plan Parent based on all of the EDQGs for their Plan Codes.

The exact methodology for each of these is described in the subsections that follow.

Note that "Threshold measures" compare results to specific expectations. The results of these measures are marked as either "Pass" or "Fail", depending on the specific details included in the measure. "Informational only measures" report the data without a "Pass" or "Fail" rating, and are not included in any of these summaries.

While the EDQG and NEDQG are similar, they serve different purposes. The EDQG provides a complete snapshot of encounter data quality for a specific Plan Code at a specific point in time. Since audits are performed at different times of year for different plans, comparing the EDQG of two different Plan Codes may be unfair – one plan may have audit results included in the EDQG for that quarter while the other does not. The NEDQG allows for comparisons between two (or more) plans by removing the audit-based measures. It provides a slightly less-complete view of the encounter data quality, but it does enable fair comparison between Plan Codes.

6.1   Steps to Encounter Data Quality Grade (EDQG)

The EDQG includes the results of all Threshold Measures in the Measurement Quarter.

To determine the EDQG use the following steps:

1. Perform threshold measures

2. Calculate the Quarterly Dimensional Rates (QDR) within each Data Quality Dimension using the results of the threshold measures

3. Determine the Quarterly Averaged Rate (QAR) by averaging the QDR

4. Determine the Quarterly Data Quality Grade (QDQG) using the averaged rate, along with minimum performance requirements for each individual dimensional rate

5. Determine the overall Encounter Data Quality Grade (EDQG) using the most recent QDQG in relation to the grades from previous consecutive quarters

Prior sections of this document described how to perform threshold measures; the following sections describe the methods used for the rest of the EDQG steps.

The EDQG is determined for each MCP county (so it is specific to an MCP in one county). An Encounter Data Grade Point Average (ED-GPA) is calculated for the overall plan parent, based on the EDQG for each county in which that MCP operates.

6.1.1   Quarterly Dimensional Rates (QDR)

The Quarterly Dimensional Rate is derived for each dimension of data quality (Completeness, Accuracy, Reasonability, and Timeliness) by dividing the number of threshold measures passed in the quarter by the total number of threshold measures applicable in the quarter. Each dimension is scored independently, using the following algorithm:

N: Number of threshold measures that passed
D: Total number of applicable threshold measures
N/D = Quarterly Dimensional Rate

Example:
N: 7 Data Reasonability threshold measures passed
D: 9 Data Reasonability threshold measures
Quarterly Data Reasonability Rate is 78%

6.1.2   Quarterly Averaged Rate (QAR)

The Quarterly Averaged Rate is derived by averaging of all of the Quarterly Dimensional Rates. This is usually calculated using all four dimensions, but in certain quarters, a

Data Accuracy rate may not be available. Under these circumstances, the Quarterly Averaged Rate uses only three dimensions.

Example:

Quarterly Data Completeness Rate	86%
Quarterly Data Accuracy Rate	100%
Quarterly Data Reasonability Rate	81%
Quarterly Data Timeliness Rate	78%
Quarterly Averaged Rate	**86%**

6.1.3   Quarterly Data Quality Grade (QDQG)

The Quarterly Data Quality Grade is primarily based on the Quarterly Averaged Rate but also considers each Quarterly Dimensional Rate. The possible values and methodology for determining the quarterly grade are described in the table below.

QDQG	Methodology
Acceptable (A)	Quarterly Averaged Rate is 85% or higher AND No Quarterly Dimensional Rate was less than 51%
Needs Improvement (N)	Quarterly Averaged Rate is between 75% and 84% inclusive AND No Quarterly Dimensional Rate was less than 51%
Unacceptable (U)	Quarterly Averaged Rate is below 75% OR Any Quarterly Dimensional Rate was less than 51%

6.1.4   Encounter Data Quality Grade (EDQG)

The overall Encounter Data Quality Grade is based on the most recent quarterly grade in relation to the grades from previous consecutive quarters. A plan code can receive a grade of High-Performing, Low-Performing, or Non-Compliant.

If a plan code's most recent quarterly grade was an A, that plan code's overall grade is High-Performing. This holds true regardless of the plan code's performance over previous quarters.

If a plan code's most recent quarterly grade was an N or U, that plan code's overall grade is either Low-Performing or Non-Compliant depending on the plan code's trending performance over immediately preceding quarterly grades.

If a plan code's most recent quarterly grade was an N, and not more than two of its immediately preceding quarterly grades were Ns or Us, its overall grade would be Low-Performing. If a plan code's most recent quarterly grade was a U, and not more than one of its immediately preceding quarterly grades were Us or two of its immediately preceding quarterly grades were Ns, its overall grade would also be Low-Performing.

If a plan code's most recent quarterly grade was an N, and three or more of its immediately preceding quarterly grades were Ns or Us, its overall grade would be Non-Compliant. If a plan code's most recent quarterly grade was a U, and two or more of its immediately preceding quarterly grades were Us or three or more of its immediately preceding quarterly grades were Ns or Us, its overall grade would also be Non-Compliant.

The table below describes the possible values and the methodologies for determining the overall Encounter Data Quality Grade.

EDQG	Methodology
High-Performing (HP)	The Plan Code's most recent QDQG = A
Low-Performing (LP)	The Plan Code's most recent QDQG = N AND Not more than two immediately preceding QDQG = N or U
Low-Performing (LP)	The Plan Code's most recent QDQG = U AND Not more than one immediately preceding QDQG = U or Not more than two immediately preceding QDQG = N
Non-Compliant (NC)	The Plan Code's most recent QDQG = N AND Three or more immediately preceding QDQG = N or U
Non-Compliant (NC)	The Plan Code's most recent QDQG = U AND Two or more immediately preceding QDQG = U or Three or more immediately preceding QDQG = N or U

6.1.5 Encounter Data Quality Grade Examples

Example 1	**Most Recent QDQG - A** Preceding QDQG - **N** Preceding QDQG - **N** Preceding QDQG - **U** Preceding QDQG - **U**	Overall EDQG **High-Performing**
Example 2	**Most Recent QDQG - A** Preceding QDQG - **U** Preceding QDQG - **U** Preceding QDQG - **U** Preceding QDQG - **U**	Overall EDQG **High-Performing**
Example 3	**Most Recent QDQG - N** Preceding QDQG - **N** Preceding QDQG - **N** Preceding QDQG - **A** Preceding QDQG - **A**	Overall EDQG **Low-Performing**
Example 4	**Most Recent QDQG - U** Preceding QDQG - **U** Preceding QDQG - **A** Preceding QDQG - **N** Preceding QDQG - **A**	Overall EDQG **Low-Performing**
Example 5	**Most Recent QDQG - N** Preceding QDQG - **N** Preceding QDQG - **N** Preceding QDQG - **N** Preceding QDQG - **A**	Overall EDQG **Non-Compliant**
Example 6	**Most Recent QDQG - U** Preceding QDQG - **U** Preceding QDQG - **U** Preceding QDQG - **A** Preceding QDQG - **A**	Overall EDQG **Non-Compliant**

Calculating Encounter Data Quality Grade (EDQG)

QMED Measures (Quarterly)

Informational Only Measures → No Pass/Fail Rating

Threshold Measures → Pass or Fail

Dimensions
- Completeness
- Accuracy
- Reasonability
- Timeliness

Rates

Quarterly Dimensional Rates (QDR)

Quarterly Averaged Rate (QAR)

Grading Methodology

All QDR ≥ 51%

Any QDR < 51%

QAR ≥ 85%

85% > QAR ≥ 75%

75% > QAR

Quarterly Data Quality Grade (QDQG)

Acceptable (A)

Needs Improvement (N)

Unacceptable (U)

Prior QDQG

Prior QDQG: ≤ 2(N or U)

Prior QDQG: = 3(N or U)

Prior QDQG: ≤ 1U or ≤ 2N

Prior QDQG: ≥ 2U or ≥ 3(N or U)

Encounter Data Quality Grade (EDQG)

High-Performing

Low-Performing

Non-Compliant

6.2　　Steps to Normalized Encounter Data Quality Grade (NEDQG)

The NEDQG includes the results of all Threshold Measures in the Measurement Quarter except measures that are based on audits (DCMT.003 and DAMT.001).

To determine the NEDQG use the following steps:

1. Perform threshold measures

2. Calculate the Normalized Quarterly Dimensional Rates (NQDR) within each Data Quality Dimension using the results of the threshold measures

3. Determine the Normalized Quarterly Averaged Rate (NQAR) by averaging the QDR

4. Determine the Normalized Quarterly Data Quality Grade (NQDQG) using the averaged rate, along with minimum performance requirements for each individual dimensional rate

5. Determine the overall Normalized Encounter Data Quality Grade (NEDQG) using the most recent NQDQG in relation to the grades from previous consecutive quarters

Prior sections of this document described how to perform threshold measures; the following sections describe the methods used for the rest of the NEDQG steps.

6.2.1　Normalized Quarterly Dimensional Rates (NQDR)

The Normalized Quarterly Dimensional Rate is derived for three dimensions of data quality (Completeness, Reasonability, and Timeliness) by dividing the number of threshold measures passed in the quarter by the total number of threshold measures applicable in the quarter, excluding DCMT.003 from the Completeness dimension. (The Accuracy Dimension is not included because the only measure in that dimension is based on audits.) Each dimension is scored independently, using the following algorithm:

> N: Number of threshold measures that passed
> D: Total number of applicable threshold measures
> **N/D = Normalized Quarterly Dimensional Rate**

Example:

N: 7 Data Reasonability threshold measures passed
D: 9 Data Reasonability threshold measures
Normalized Quarterly Data Reasonability Rate is 78%

6.2.2 Normalized Quarterly Averaged Rate (NQAR)

The Normalized Quarterly Averaged Rate is derived by averaging of all of the Normalized Quarterly Dimensional Rates.

Example:

Normalized Quarterly Data Completeness Rate	86%
Normalized Quarterly Data Reasonability Rate	81%
Normalized Quarterly Data Timeliness Rate	78%
Normalized Quarterly Averaged Rate	**82%**

6.2.3 Normalized Quarterly Data Quality Grade (NQDQG)

The Normalized Quarterly Data Quality Grade is primarily based on the Normalized Quarterly Averaged Rate but also considers each Normalized Quarterly Dimensional Rate. The possible values and methodology for determining the quarterly grade are described in the table below.

NQDQG	Methodology
Acceptable (A)	Normalized Quarterly Averaged Rate is 85% or higher AND No Normalized Quarterly Dimensional Rate was less than 51%
Needs Improvement (N)	Normalized Quarterly Averaged Rate is between 75% and 84% inclusive AND No Normalized Quarterly Dimensional Rate was less than 51%
Unacceptable (U)	Normalized Quarterly Averaged Rate is below 75% OR Any Normalized Quarterly Dimensional Rate was less than 51%

6.2.4 Normalized Encounter Data Quality Grade (NEDQG)

The overall Normalized Encounter Data Quality Grade is based on the most recent quarterly grade in relation to the grades from previous consecutive quarters. A plan code can receive a grade of High-Performing, Low-Performing, or Non-Compliant.

If a plan code's most recent normalized quarterly grade was an A, that plan code's overall normalized grade is High-Performing. This holds true regardless of the plan code's performance over previous quarters.

If a plan code's most recent normalized quarterly grade was an N or U, that plan code's overall normalized grade is either Low-Performing or Non-Compliant depending on the plan code's trending performance over immediately preceding quarterly grades.

If a plan code's most recent normalized quarterly grade was an N, and not more than two of its immediately preceding normalized quarterly grades were Ns or Us, its overall normalized grade would be Low-Performing. If a plan code's most recent normalized quarterly grade was a U, and not more than one of its immediately preceding normalized quarterly grades were Us or two of its immediately preceding normalized quarterly grades were Ns, its overall grade would also be Low-Performing.

If a plan code's most recent normalized quarterly grade was an N, and three or more of its immediately preceding normalized quarterly grades were Ns or Us, its overall normalized grade would be Non-Compliant. If a plan code's most recent normalized quarterly grade was a U, and two or more of its immediately preceding normalized quarterly grades were Us or three or more of its immediately preceding normalized quarterly grades were Ns or Us, its overall normalized grade would also be Non-Compliant.

The table below describes the possible values and the methodologies for determining the overall Normalized Encounter Data Quality Grade.

NEDQG	Methodology
High-Performing (HP)	The Plan Code's most recent NQDQG = A
Low-Performing (LP)	The Plan Code's most recent NQDQG = N AND Not more than two immediately preceding NQDQG = N or U
	The Plan Code's most recent NQDQG = U AND Not more than one immediately preceding NQDQG = U or Not more than two immediately preceding NQDQG = N

NEDQG	Methodology
Non-Compliant (NC)	The Plan Code's most recent NQDQG = N AND Three or more immediately preceding NQDQG = N or U
	The Plan Code's most recent NQDQG = U AND Two or more immediately preceding NQDQG = U or Three or more immediately preceding NQDQG = N or U

6.2.5 Normalized Encounter Data Quality Grade Examples

Example 1	**Most Recent NQDQG - A** Preceding NQDQG - **N** Preceding NQDQG - **N** Preceding NQDQG - **U** Preceding NQDQG - **U**	Overall NEDQG **High-Performing**
Example 2	**Most Recent NQDQG - A** Preceding NQDQG - **U** Preceding NQDQG - **U** Preceding NQDQG - **U** Preceding NQDQG - **U**	Overall NEDQG **High-Performing**
Example 3	**Most Recent NQDQG - N** Preceding NQDQG - **N** Preceding NQDQG - **N** Preceding NQDQG - **A** Preceding NQDQG - **A**	Overall NEDQG **Low-Performing**
Example 4	**Most Recent NQDQG - U** Preceding NQDQG - **U** Preceding NQDQG - **A** Preceding NQDQG - **N** Preceding NQDQG - **A**	Overall NEDQG **Low-Performing**
Example 5	**Most Recent NQDQG - N** Preceding NQDQG - **N** Preceding NQDQG - **N** Preceding NQDQG - **N** Preceding NQDQG - **A**	Overall NEDQG **Non-Compliant**

Example 6	**Most Recent NQDQG - U** Preceding NQDQG - **U** Preceding NQDQG - **U** Preceding NQDQG - **A** Preceding NQDQG - **A**	Overall NEDQG **Non-Compliant**

Calculating Normalized Encounter Data Quality Grade (NEDQG)

```
                        ┌─────────────────────────────┐
                        │  QMED Measures (Quarterly)  │
                        └─────────────────────────────┘
                 ┌──────────────┴──────────────────────┐
                 ▼                                      ▼
    ┌─────────────────────────┐         ┌─────────────────────────────┐
    │ Informational Only       │         │     Threshold Measures       │
    │ Measures                 │         │ (excluding audit measures)   │
    └─────────────────────────┘         └─────────────────────────────┘
                 ▼                                      ▼
    ┌─────────────────────────┐         ┌─────────────────────────────┐
    │   No Pass/Fail Rating    │         │        Pass or Fail          │
    └─────────────────────────┘         └─────────────────────────────┘
```

Dimensions:

Completeness	Reasonability	Timeliness

Rates:

Normalized Quarterly Dimensional Rates (NQDR)

Normalized Quarterly Averaged Rate (NQAR)

Grading Methodology:

All NQDR ≥ 51%	Any NQDR < 51%

NQAR ≥ 85%	85% > NQAR ≥ 75%	75% > NQAR

Normalized Quarterly Data Quality Grade (NQDQG):

Acceptable (A)	Needs Improvement (N)	Unacceptable (U)

Prior NQDQG:

Prior NQDQG: ≤ 2(N or U)	Prior NQDQG: = 3(N or U)	Prior NQDQG: ≤ 1U or ≤ 2N	Prior NQDQG: ≥ 2U or ≥ 3(N or U)

Normalized Encounter Data Quality Grade (NEDQG):

High-Performing	**Low-Performing**	**Non-Compliant**

6.3   Calculating Encounter Data Grade Point Average (ED-GPA)

The Encounter Data Quality Grade (EDQG) is calculated for Plan Codes – therefore a Plan Parent operating in 10 counties will have 10 separate EDQGs. The Grade Point Average (ED-GPA) is calculated for the Plan Parent, using numerical equivalents for the EDQGs earned by the MCP in all of their counties. Plan Parents with a single Plan Code will have an ED-GPA that matches the numeric value of their EDQG.

Note: the Normalized Encounter Data Quality Grade (NEDQG) is not used for calculating ED-GPA.

EDQG	Numeric value for calculating ED-GPA
High-Performing (HP)	4
Low-Performing (LP)	2
Non-Compliant (NC)	0

In addition to the numeric value of the ED-GPA, if any of the individual Plan Codes had an EDQG of Non-Compliant, the ED-GPA will be marked with an asterisk ("*").

6.3.1 Encounter Data Grade Point Average Examples

Example 1	**Plan A has four Plan Codes** Plan Code AAA EDQG: High-Performing **(4)** Plan Code AAB EDQG: High-Performing **(4)** Plan Code AAC EDQG: Low-Performing **(2)** Plan Code AAD EDQG: Low-Performing **(2)**	Encounter Data Grade Point Average (ED-GPA): **3.0**
Example 2	**Plan B has four Plan Codes** Plan Code BBB EDQG: High-Performing **(4)** Plan Code BBC EDQG: High-Performing **(4)** Plan Code BBD EDQG: Non-Compliant **(0)** Plan Code BBE EDQG: High-Performing **(4)**	Encounter Data Grade Point Average (ED-GPA): **3.0***

Example 3	**Plan C has four Plan Codes** Plan Code CCC EDQG: High-Performing **(4)** Plan Code CCD EDQG: High-Performing **(4)** Plan Code CCE EDQG: Low-Performing **(2)** Plan Code CCF EDQG: High-Performing **(4)**	Encounter Data Grade Point Average (ED-GPA): **3.5**
Example 4	**Plan D has three Plan Codes** Plan Code DDD EDQG: High-Performing **(4)** Plan Code DDE EDQG: Low-Performing **(2)** Plan Code DDF EDQG: Non-Compliant **(0)**	Encounter Data Grade Point Average (ED-GPA): **2.0***
Example 5	**Plan E has three Plan Codes** Plan Code EEE EDQG: Non-Compliant **(0)** Plan Code EEF EDQG: Low-Performing **(2)** Plan Code EEG EDQG: Non-Compliant **(0)**	Encounter Data Grade Point Average (ED-GPA): **0.7***
Example 6	**Plan F has three Plan Codes** Plan Code FFF EDQG: High-Performing **(4)** Plan Code FFG EDQG: High-Performing **(4)** Plan Code FFH EDQG: High-Performing **(4)**	Encounter Data Grade Point Average (ED-GPA): **4.0**
Example 7	**Plan G has one Plan Code** Plan Code GGG EDQG: High-Performing **(4)**	Encounter Data Grade Point Average (ED-GPA): **4.0**

7) Document Control Policy

This document was initially developed by the Encounter Data Improvement Project (EDIP). It is part of the Encounter Data Quality Monitoring and Reporting Plan (EDQMRP), maintained by DHCS' Managed Care Quality and Monitoring Division (MCQMD).

DHCS shall review all measures on at least an annual basis with updates as appropriate. New measures will be introduced as needed. When existing measures are changed or new measures added the new versions shall be implemented on the effective date set for every version of every measure.

When a measure is added, changed, or deleted, it shall be noted in the document-level Revision History, and the details of the change shall be noted in the change log for that measure and shall include the effective date for the change. This is described in more detail below.

7.1   Measure Identifiers

In addition to a title, each measure shall have a unique identifier associated with it. Measure identifiers shall be in the following format:

PREFIX.SEQUENTIAL NUMBER

The prefix indicates which data quality dimension this measure addresses, and whether this measure is a Threshold measure or an Informational Only measure. The prefixes are:

Data Quality Dimension	Category	Prefix
Data Completeness	Threshold	DCMT
	Information Only	DCMI
Data Accuracy	Threshold	DAMT
	Information Only	DAMI
Data Reasonability	Threshold	DRMT
	Information Only	DRMI
Data Timeliness	Threshold	DTMT
	Information Only	DTMI

When a measure is updated, the measure ID number does not change, unless the measure is changed from Information Only to Threshold (or vice versa). When that happens, the original measure and measure number is retired, and a new measure with a new number is created.

Measure identifiers shall never be re-used – once a measure is retired, its identifier shall not be used for newer measures. In future versions of this document, after such time as measures have been retired, a list of retired measures shall be included in an appendix.

7.2 Document Level Revision History

Every time a new version of this document is published, it shall include a new entry in the Revision History table.

The rules for the columns in this table are as follows:

7.2.1 Document Version

This column shall have a new version number each time this document is published. The version number of the new entry in the table shall match the version number on the front cover of the document.

The version number shall be in the following format:

MAJOR UPDATE NUMBER.MINOR UPDATE NUMBER

For example, version **4.3** is **Major Update Number 4**, **Minor Update Number 3**.

The Major Update Number shall increment when any one of the following is true about the new document version:

- Includes new measures
- Deletes measures
- Changes the "Encounter Data Quality Summaries" section

The Minor Update number shall be reset to 0 whenever the Major Update number is changed. When a new version of the document is published without changing the Major Update Number, the Minor Update Number shall be incremented.

7.2.2 Publication Date

This column shall have the date that the new version is published. This shall match the date on the front cover of the document.

7.2.3 Revision Author(s)

This column shall have the name of the author or authors responsible for the updates being published.

7.2.4 Brief Description of Document Changes

This column shall list any changes made in this version of the document.

- For changes made in the Overview section of the document, the change shall be briefly summarized.
- For changes in the "Encounter Data Quality Summaries" section, the change shall be described in detail.
- For changes made in any existing measure, the measure shall be noted as having changed.
- Measures that have been added shall be noted.
- Measures that have been deleted shall be noted.

7.3 Measure Level Change Logs

Each measure shall have a Change Log. Every time a measure is changed, it shall include a new entry in the Change Log for that measure.

The rules for the columns in this table are as follows:

7.3.1 Measure Version

This column shall have a new version number each time the measure is changed. The version number shall be in the following format:

MAJOR UPDATE NUMBER.MINOR UPDATE NUMBER

For example, version **3.1** is **Major Update Number 3**, **Minor Update Number 1**.

The Major Update Number shall increment when the following is true:

- Expected Results change on a "Threshold" measure

The Minor Update number shall be reset to 0 whenever the Major Update number is changed. When the measure is updated without changing the Major Update Number, the Minor Update Number shall be incremented.

7.3.2 Document Version

This column shall match the Document Version on the front cover of the document at the time the change was made. This allows a reader to trace changes in a measure back to the version of the document in which they first appeared.

7.3.3   Author(s)

This column shall have the name of the author or authors responsible for the updates to the measure.

7.3.4   Effective Date

This column shall have the effective date for the measure. This might be the same as the date of the document from the front cover, but may not be, when DHCS deems it appropriate to publish the measure prior to implementing it.

7.3.5   Description of Changes

A complete description of everything that changed since the prior version of the measure shall be included here.

8) Glossary

A&I – DHCS Audits and Investigations Division

Actual Visits – the number of visits for a particular type of encounter per 1000 beneficiaries for a specific plan code

Adjusted Expected Visits – a number of visits in the encounter data for a particular type of encounter per 1000 beneficiaries in the aid code rollup for the entire state

CCI – Coordinated Care Initiative

Certified Eligible – a beneficiary who either does not have a share of cost, or who has met their share of cost for the month

CMS – Centers for Medicare and Medicaid Services

Date of Service – the date on which an encounter occurred

Denial – an encounter that has been identified with an error(s) and requires a correcting submission, either a void or replacement

DHCS – California Department of Health Care Services

DOS – see *Date of Service*

Duplicate – an encounter that contains a set of data elements that is identical to an existing accepted encounter and is not identified as a void or replacement

EDQU – DHCS-MCQMD Encounter Data Quality Unit

EHR – Electronic Health Records

Encounter Data – the administrative information that describes health care interactions between beneficiaries and providers

FFS – Fee for Service

Full-scope plans – MCPs contracted to cover a full range of health care services, including inpatient, professional and pharmacy, to members within the full range of aid categories

In control – a process is occurring within the statistically ascertained upper and lower normal limits for that process

Lagtime – the length of time, expressed in days, between DOS and Submission Date

MCP – Managed Care Plan

MCQMD – DHCS Managed Care Quality and Monitoring Division

NCPDP 2.2 and 4.2 –national standard formats for reporting post-adjudication Pharmacy claims and encounters

Plan Code – used to denote a Managed Care Plan in a specific county – see *Plan Parent*

Plan Parent – used to denote the Managed Care Plan without specifying county – a Plan Parent may have one or more *Plan Codes*

Rejection – an encounter file submission that is not accepted by DHCS

Replacement – an encounter that is submitted to replace an existing encounter

SPC – Statistical Process Control

STC – Special Terms and Conditions

Submission Date – the date on which DHCS receives an encounter from an MCP

Turnaround time – the length of time between the date an encounter is denied and the Submission Date of its accepted void or replacement

Visit – a unique combination of billing provider, beneficiary, and DOS

Void – an encounter that is submitted to remove an existing encounter

X12 837I, version 5010 – a national standard format for reporting Institutional claims and encounters

X12 837P, version 5010 – a national standard format for reporting Professional claims and encounters

9) Aid Categories

Some encounter data quality measures use Aid Category – this data element is derived from the beneficiaries' Aid Codes using the following logic:

Aid Category	All of the following is true:
Adult & Family (18 and Under)	Aid Code is one of the following: 01, 02, 03, 04, 06, 08, 0A, 2N, 30, 32, 33, 34, 35, 37, 38, 39, 3A, 3C, 3E, 3G, 3H, 3L, 3M, 3N, 3P, 3R, 3S, 3U, 3W, 40, 42, 45, 46, 47, 4A, 4F, 4G, 4K, 4M, 54, 59, 5K, 6S, 72, 7A, 7J, 7X, 81, 82, 83, 86, 87, 8P, 8R, 9G
	AND Age of certified eligible is equal to or less than 18
Adult & Family (Over 18)	Not in the category above
	AND Aid Code is one of the following: 01, 02, 03, 04, 06, 08, 0A, 2N, 30, 32, 33, 34, 35, 37, 38, 39, 3A, 3C, 3E, 3G, 3H, 3L, 3M, 3N, 3P, 3R, 3S, 3U, 3W, 40, 42, 45, 46, 47, 4A, 4F, 4G, 4K, 4M, 54, 59, 5K, 6S, 72, 7A, 7J, 7X, 81, 82, 83, 86, 87, 8P, 8R, 9G
	AND Age of certified eligible is over 18
Aged & Disabled / Non-dual	Not in the categories above
	AND Aid Code is one of the following: 10, 14, 16, 17, 1E, 1H, 20, 24, 26, 27, 2E, 2H, 36, 60, 64, 65, 66, 67, 6A, 6C, 6E, 6G, 6H, 6J, 6N, 6P, 6R, 6V, 6W, 6X, 6Y
	AND the certified eligible is NOT in Medicare NOT (MC_STAT_A IN ('1','2','3','5','7') OR MC_STAT_B IN ('1','2','5','7') OR MC_STAT_D IN ('1','2','3','7'))
Disabled / Dual	Not in the categories above
	AND Aid Code is one of the following: 20 , 24 , 26 , 27 , 2E , 2H , 36 , 60 , 64 , 65 , 66 , 67 , 6A , 6C , 6E , 6G , 6H , 6J , 6N , 6P , 6R , 6V , 6W , 6X , 6Y

Aid Category	All of the following is true:
	AND the certified eligible is in Medicare (MC_STAT_A IN ('1','2','3','5','7') OR MC_STAT_B IN ('1','2','5','7') OR MC_STAT_D IN ('1','2','3','7'))
Aged / Dual	Not in the categories above
	AND Aid Code is one of the following: 10 , 14 , 16 , 17 , 1E , 1H
	AND the certified eligible is in Medicare (MC_STAT_A IN ('1','2','3','5','7') OR MC_STAT_B IN ('1','2','5','7') OR MC_STAT_D IN ('1','2','3','7'))
BCCTP	Not in the categories above
	AND Aid Code is one of the following: 0L, 0M, 0N, 0P, 0R, 0T, 0U, 0W
LTC / Non-dual	Not in the categories above
	AND Aid Code is one of the following: 13, 23, 53, 63
	AND the certified eligible is NOT in Medicare NOT (MC_STAT_A IN ('1','2','3','5','7') OR MC_STAT_B IN ('1','2','5','7') OR MC_STAT_D IN ('1','2','3','7'))
LTC / Dual	Not in the categories above
	AND Aid Code is one of the following: 13, 23, 53, 63
	AND the certified eligible is in Medicare (MC_STAT_A IN ('1','2','3','5','7') OR MC_STAT_B IN ('1','2','5','7') OR MC_STAT_D IN ('1','2','3','7'))
Other	Not in the categories above

10) Encounter Types

Some encounter data quality measures use Encounter Type – this data element is derived from the Transaction Type, Facility Type, and Revenue Code using the following logic:

Transaction	Facility Type/ Revenue Code	Encounter Type
837P	NA	05 – Physician
NCPDP		01 – Pharmacy
837I	11 - Hospital Inpatient (Including Medicare Part A)	03 – Hospital Inpatient
837I	41 - Religious Nonmedical Health Care Institutions-Hospital Inpatient	03 – Hospital Inpatient
837I	18 - Hospital Swing Beds	02 – Long Term Care
837I	21 - SNF Inpatient (Including Medicare Part A)	02 – Long Term Care
837I	12 - Hospital Inpatient (Medicare Part B only)	04 – Outpatient
837I	13 - Hospital Outpatient	04 – Outpatient
837I	14 - Hospital Laboratory Services Provided to Non-patients	04 – Outpatient
837I	22 - SNF Inpatient (Medicare Part B only)	04 – Outpatient
837I	23 - SNF Outpatient	04 – Outpatient
837I	32 - Home Health-Inpatient(Plan of treatment under Part B only)	04 – Outpatient
837I	34 - Home Health-Other (for medical and surgical services not under a plan of treatment)	04 – Outpatient
837I	43 - Religious Nonmedical Health Care Institutions-Outpatient Services	04 – Outpatient
837I	71 - Clinic - Rural Health	04 – Outpatient
837I	72 - Clinic - Hospital Based or Independent	04 – Outpatient
837I	73 - Clinic - Free Standing	04 – Outpatient
837I	74 - Clinic - Outpatient Rehabilitation Facility	04 – Outpatient

Transaction	Facility Type/ Revenue Code		Encounter Type
837I	75 - Clinic - Comprehensive Outpatient Rehabilitation		04 – Outpatient
837I	76 - Clinic - Community Mental Health Center		04 – Outpatient
837I	77 - Clinic - Federally Qualified Health Center (FQHC)		04 – Outpatient
837I	78 - Licensed Freestanding Emergency Medical Facility		04 – Outpatient
837I	79 - Clinic - Other		04 – Outpatient
837I	81 - Hospice (non-hospital based)		04 – Outpatient
837I	82 - Hospice (hospital based)		04 – Outpatient
837I	83 - Ambulatory Surgery Center		04 – Outpatient
837I	84 - Free Standing Birthing Center		04 – Outpatient
837I	85 - Critical Access Hospital		04 – Outpatient
837I	28 - SNF Swing Beds	One of the Revenue Codes is a bed code	02 – Long Term Care
		No revenue codes are bed codes	04 – Outpatient
837I	65 - Intermediate Care - Level I	One of the Revenue Codes is a bed code	02 – Long Term Care
		No revenue codes are bed codes	04 – Outpatient
837I	66 - Intermediate Care - Level II	One of the Revenue Codes is a bed code	02 – Long Term Care
		No revenue codes are bed codes	04 – Outpatient
837I	86 - Residential Facility	One of the Revenue Codes is a bed code	02 – Long Term Care

Transaction	Facility Type/ Revenue Code		Encounter Type
		No revenue codes are bed codes	04 – Outpatient
837I	89 - Special Facility - Other	One of the Revenue Codes is a bed code	02 – Long Term Care
		No revenue codes are bed codes	04 – Outpatient